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THE AMERICAN ELEVATOR AND GRAIN TRADE

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PUBLISHED BY Mitchell Brothers Publishing Co. } A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS. } One Dollar Per Annum SINGLE COPIES, 15 CENTS

VOL. XLII 431 South Dearborn Street, Chicago, Ill., April 15, 1924 NO. 10

WE ARE PROGRESSIVE ENOUGH
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McKENNA & DICKEY
Grain
60 BOARD OF TRADE
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For your
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**JONES-HETTELSATER
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Designers and Builders
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Quality Product, Attractive Prices, Fresh Stock at Convenient Points
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FEED FORMULAS FEED PLANT ENGINEERING
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For
Grain Elevator
and Silo
Construction

(Patented)
Manufactured and sold by
NELSON MACHINE CO.
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TOWNSEND B. SMITH
Designer and Builder
of
Grain Elevators
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Reliance Construction Company
Furnish Plans, Estimates and Build
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SCOOP TRUCK**
CAPACITY { 200 Lbs. Coal
 { 2 1/2 Bushels Grain



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Cents an Hour to the
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who uses it in unloading Coal
or Grain from box cars.
Hence, in two weeks' use
the Scoop-Truck will pay for itself and
cost you nothing for its use thereafter.
It will last for years and save the wear-
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a like amount of work.
Hundreds have tried it and will certify to the
truth of these statements.
Why not order now and let the Scoop-Truck
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Patented July 30, 1907
PRICE: \$15.00 F. O. B. cars at factory
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The Winter's Truck and Wagon Dump
Offers exceptional features and superior points of construc-
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Lifts on all four corners, thus causing no load leverage,
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sures an absolutely clean dump without scraping.
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Advanced Elevator Practice

Elevator practice, under the able development and guidance of big engineering houses, has advanced remarkably until today's practice involves use of the most up-to-date materials and machinery.

For example, in the Northern Central Elevator at Baltimore, Messrs. James Stewart & Co., the designers and constructors, incorporated such

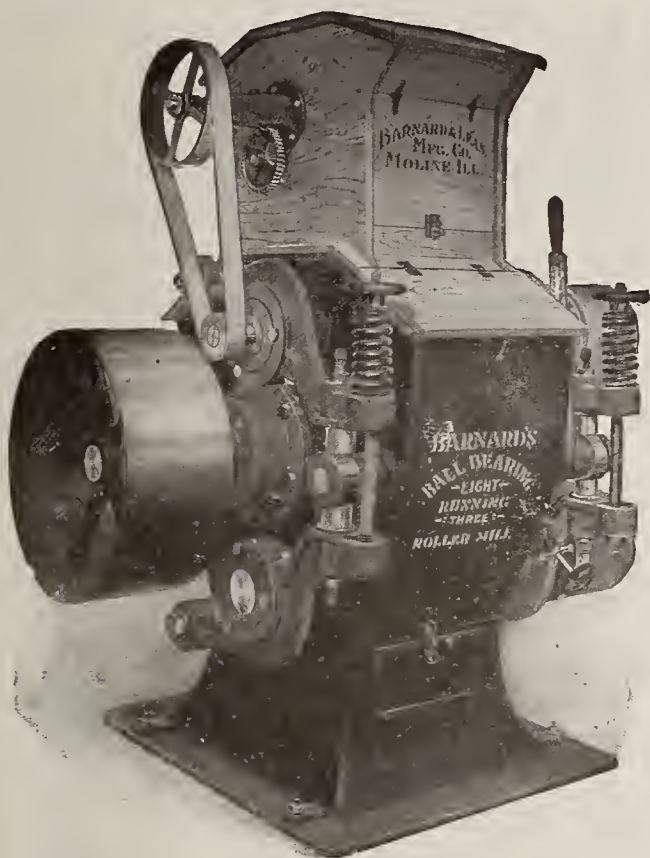
items as Ingot iron, silent chain drives, herring-bone reducing gears, roller bearings, unit car dumpers, and, quite as fitly—"CARIGRAIN" and "LEGRAIN" Belt—eight and one-third miles of it.

"CARIGRAIN" and "LEGRAIN" Belts in the grain elevator are sound, up-to-date practice.

THE B. F. GOODRICH RUBBER COMPANY
Akron, Ohio

Goodrich

"Legrain" and "Carigrain" BELTS



**BARNARD-MOLINE
BALL BEARING
LIGHT RUNNING
THREE ROLLER
FEED MILL**

Most Profitable to Operate For Making Coarse Corn Meal and Chop Feed

Also adaptable for grinding oats, barley, wheat for graham, rye and other small grains. Wet corn can be ground on this mill as well as dry corn, but not with such a capacity.

The Barnard-Moline Ball Bearing type of feed mill, illustrated above, requires less power to operate than the babbitted bearing type of mill, and it runs positively cool at all times with no indication of oil or grease about it; thus effecting a great saving in power and oil consumption.

This mill has very large capacity, considering the length of rolls, which is due to the fact that the corn or other material drops from the feed hopper onto the large middle roll, the circumference of which travels two and one-third times faster than the circumference of the other rolls, thus carrying the material through at a fast rate of speed. There is no possible chance for the material to clog.

This mill is equipped with a fine automatic feeder of great capacity, which is easily set, and feeds a steady, even stream to the rolls, not being blocked or choked by twine, bits of cob or such material.

For those desiring capacity, light-running, cool, even, granular grinding, simplicity of adjustment and durability, this mill will absolutely fulfill the requirements.

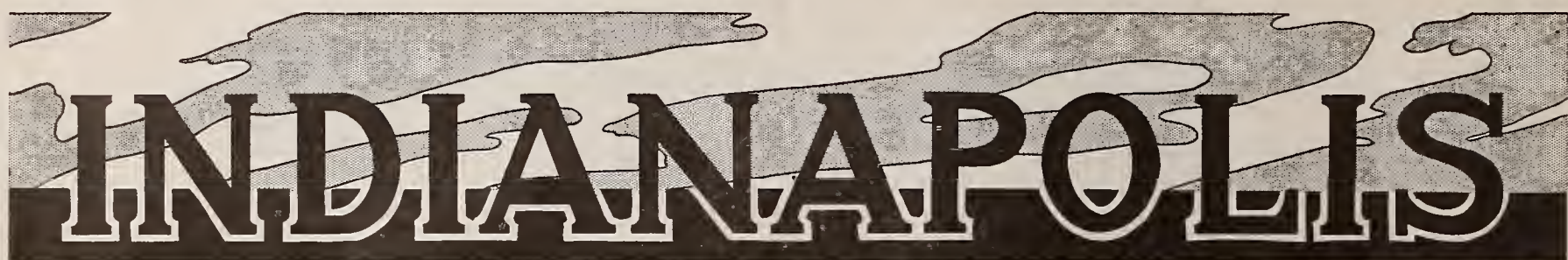


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Movement of Grain and Hay During the Year 1923

	Receipts	Shipments
Corn	17,975,000 bushels	12,524,000 bushels
Oats	12,080,000 bushels	10,670,000 bushels
Wheat	6,131,000 bushels	3,927,000 bushels
Rye	383,000 bushels	331,000 bushels

The following Receivers and Shippers are members of
Indianapolis Board of Trade

Bert A. Boyd Grain Co. The Indianapolis Commission House <i>"Consignments Our Hobby"</i> We Never Buy for Ourselves—We Always Sell for You	JAMES E. BENNETT & CO. GRAIN, STOCKS, COTTON <small>MEMBERS</small> New York Stock Exchange Chicago Board of Trade and other leading exchanges. <i>Cash Grain Shipments Solicited</i> Indianapolis branch at 718 Board of Trade	H. E. Kinney Grain Co. COMMISSION—BROKERAGE
The Cleveland Grain Co. OPERATING FIVE TERMINAL ELEVATORS <i>Mighty Good Consignment Service</i> Ed. K. Shepperd, Manager	The Bingham Grain Company Receivers and Shippers of G R A I N	Lamson Bros. & Co. GRAIN, STOCKS AND PROVISIONS Members of New York Stock Exchange, Chicago Board of Trade and other Commodity Markets
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> C. D. Menzie Grain and Brokerage Co. SALES MADE TO ARRIVE </div> <div style="text-align: center;">  </div> </div>		

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The Better Kind of Grain Handling Machinery



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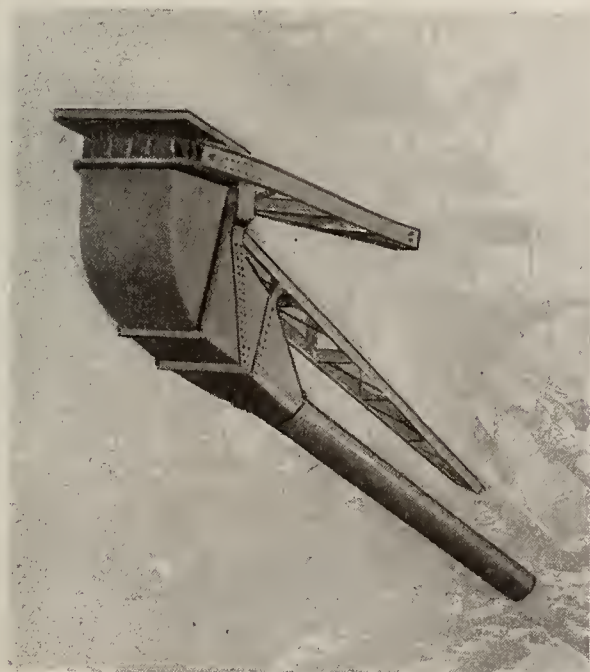
Weller made products are sold on the basis of quality. Installed in your elevator they will help you to operate at full capacity at the lowest cost for upkeep. Frequent shutdowns and waiting for repairs dissipate your profits so why not specify

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Made by men who know its application and the conditions under which it is to operate. It proves its merit because quality is built into it.



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NORTHERN CENTRAL ELEVATOR
BALTIMORE, MD.



DOCK SPOUTS
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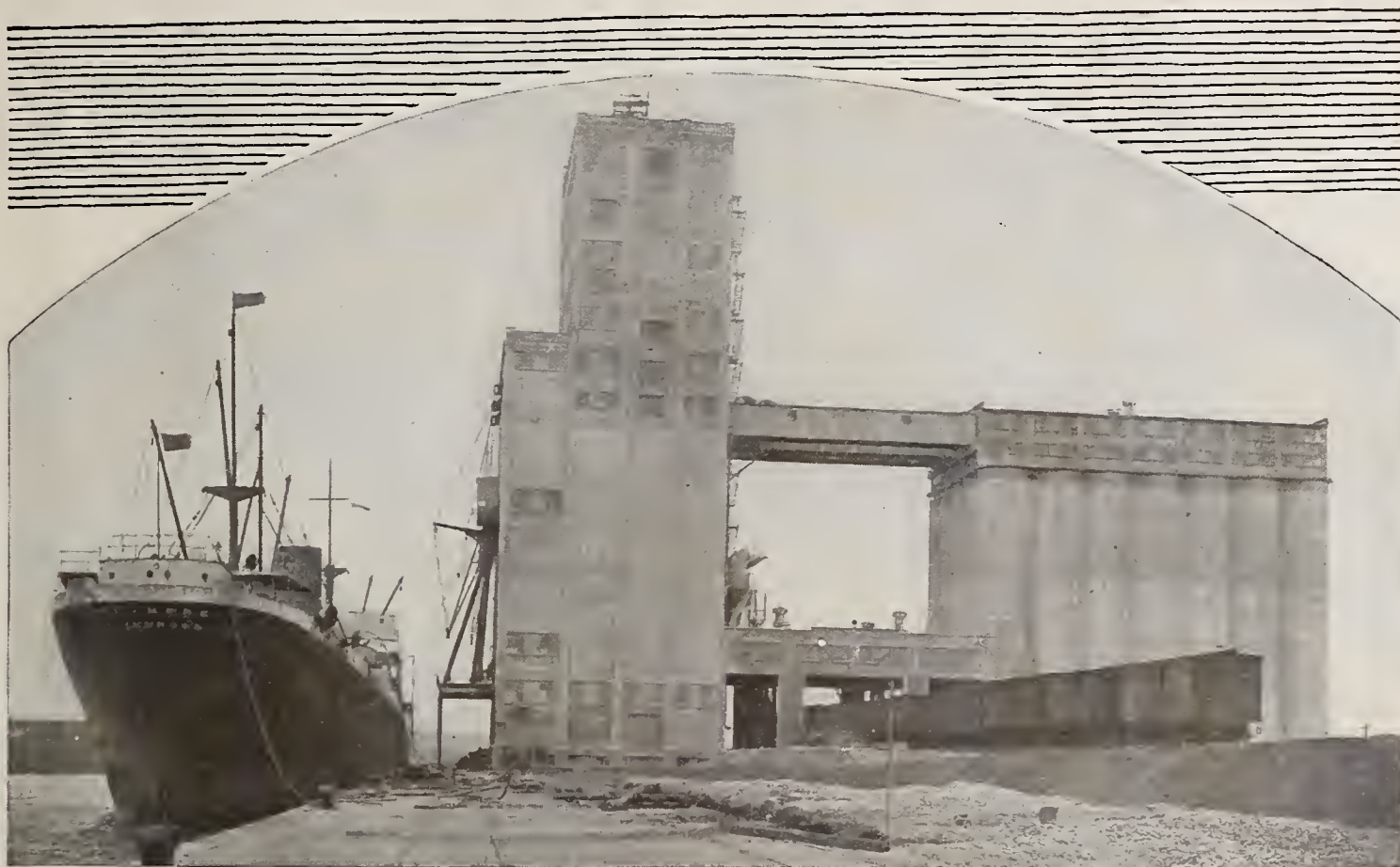
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Daily Receiving 200,000 to
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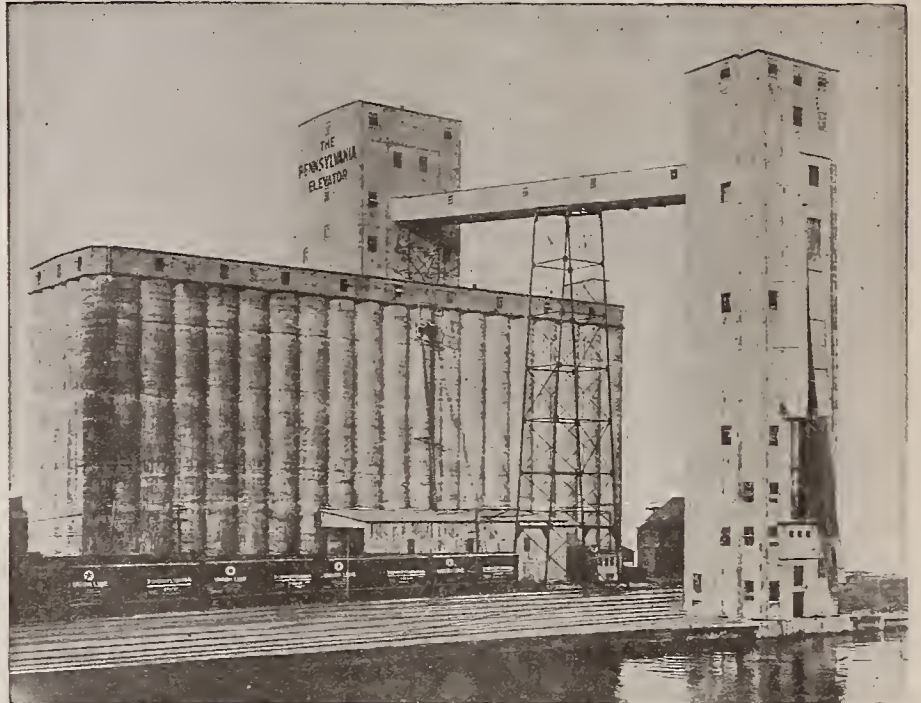
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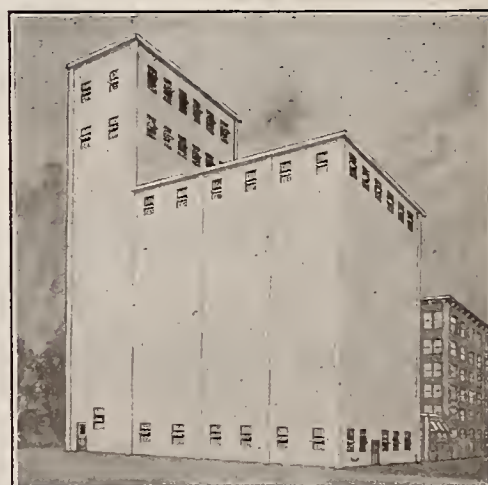
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The most practical dump manufactured.

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All-steel machines for all kinds of
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to tell you the exact condition of
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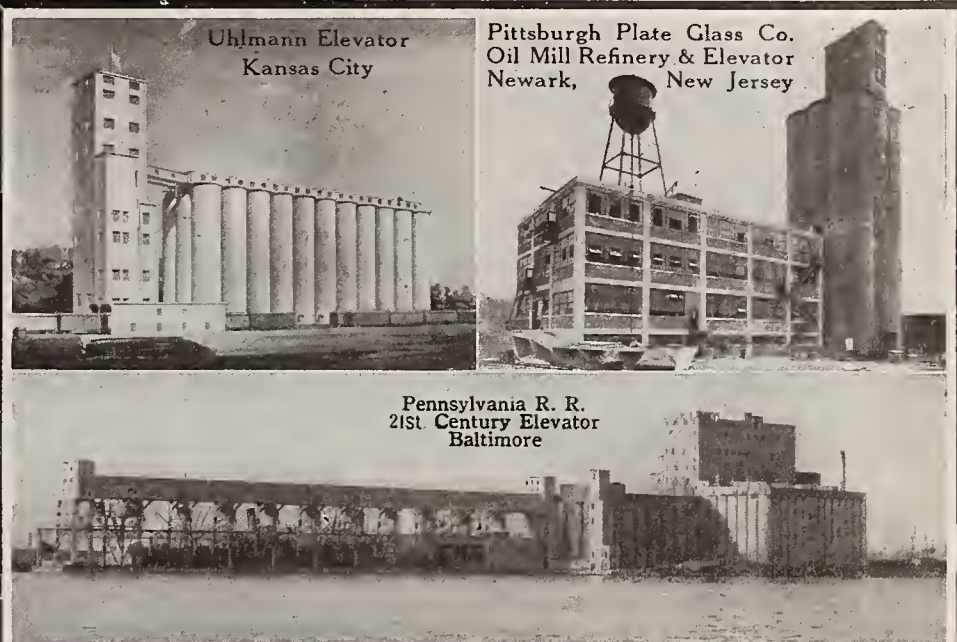
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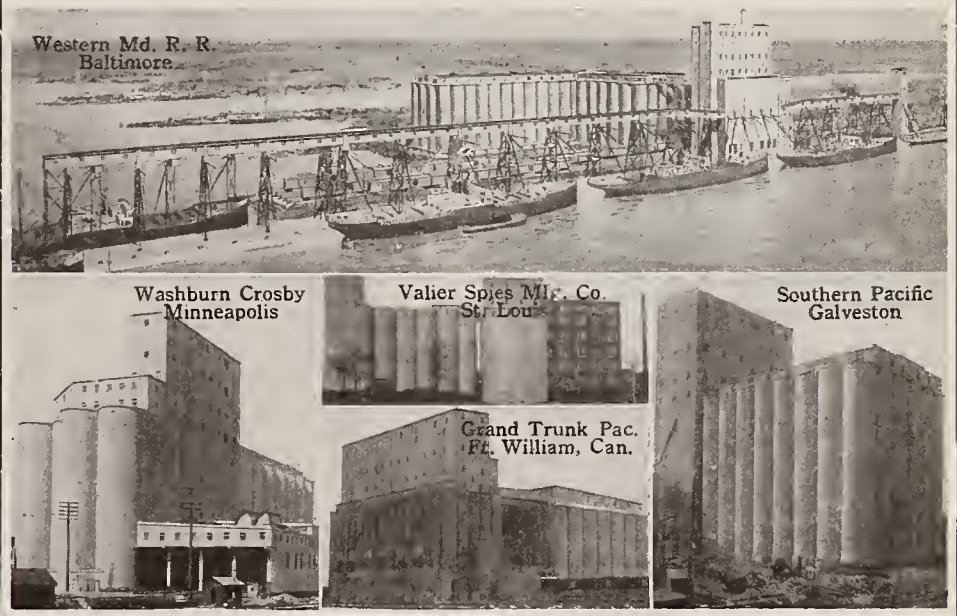
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We have built for many of your friends—Eventually we will build for you. Why not now?



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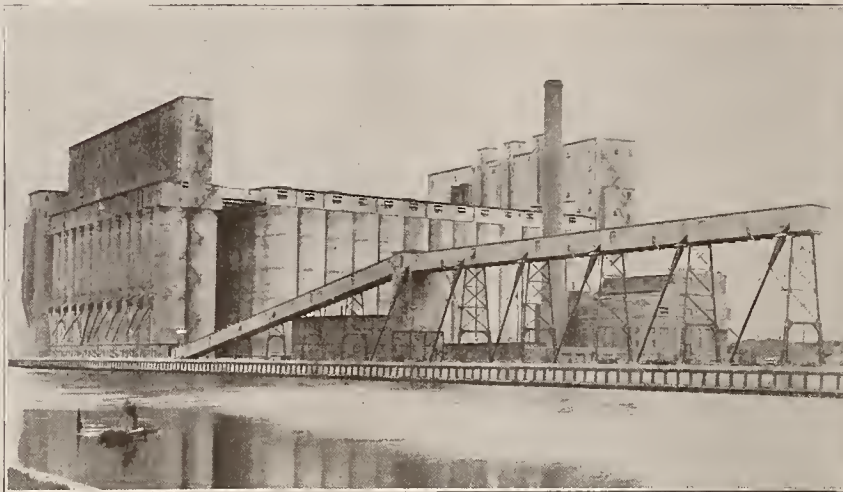
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Manchester, England
Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
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Capacity 750,000 Bushels
Completed 1920



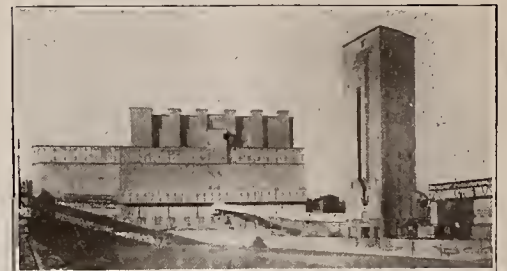
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Capacity 2,600,000 Bushels
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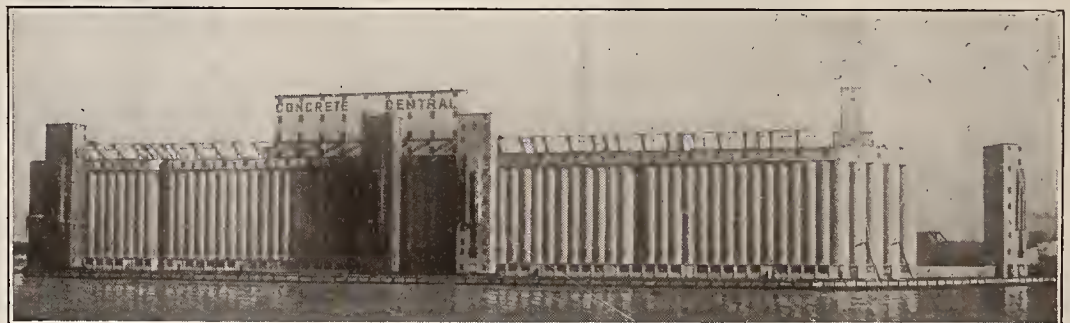
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Capacity 3,800,000 Bushels

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Engineers and Constructors
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The Day Dust Collecting System

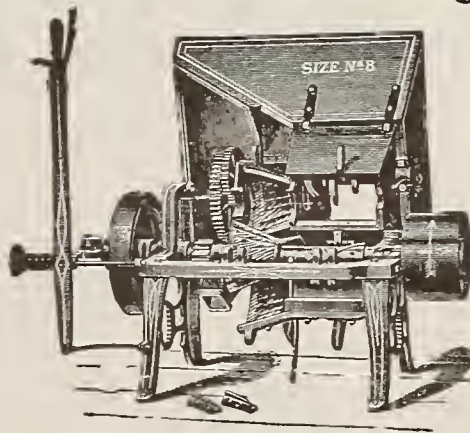
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THE DAY COMPANY, Minneapolis, Minn.

Make Feed Grinding More Profitable!

Bowsher's "Combination" Mills do this



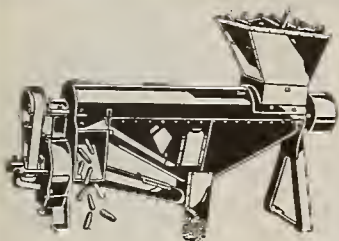
Because their large capacity, cone-shaped grinders and positive self ear feeders are properly designed to direct every ounce of power energy to the actual reduction of the grain.

Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

11 Sizes, 2 to 25 H.P.

Sold with or without Sacking Elevator.

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When you buy a
Corn Sheller
be sure it's a
Triumph.

The illustrated bulletin states ten reasons why you should have a TRIUMPH.

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Transit Leaks

are unknown to the grain shippers who use

KENNEDY Car Liners

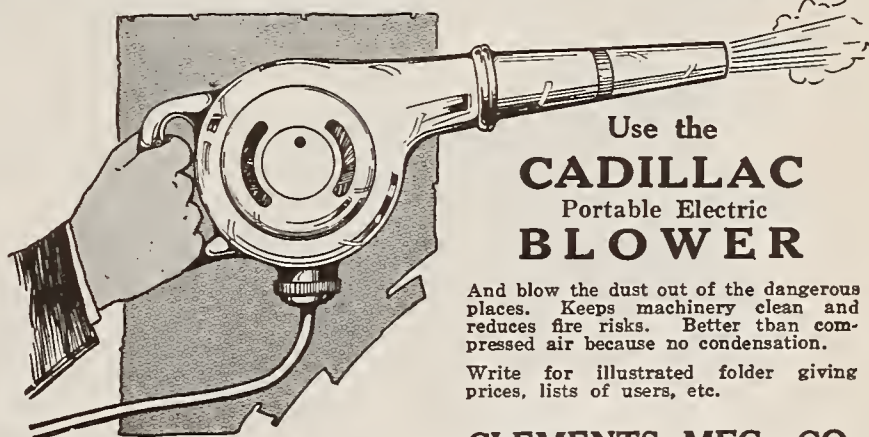
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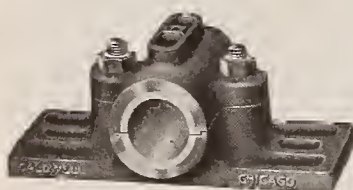
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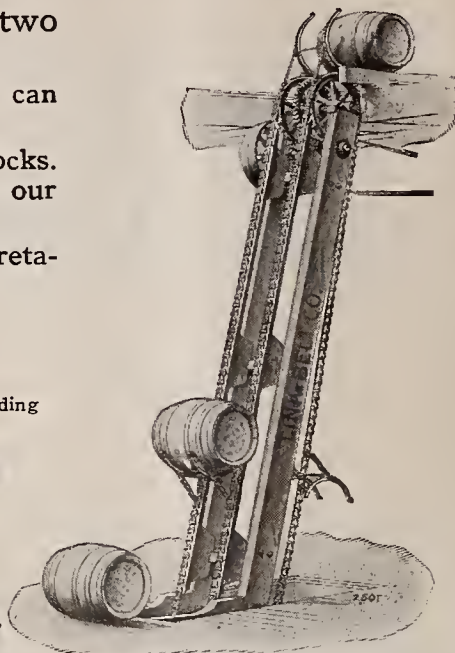
WHEN you buy Link-Belt or Caldwell equipment you get two classes of service.

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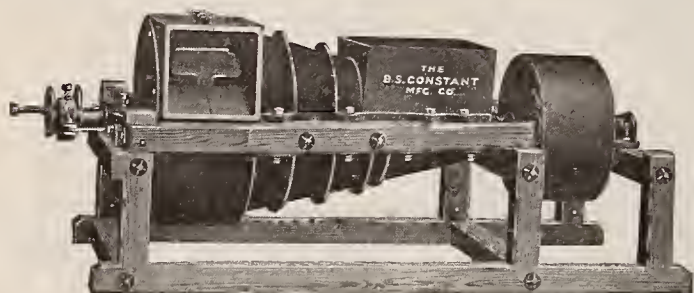
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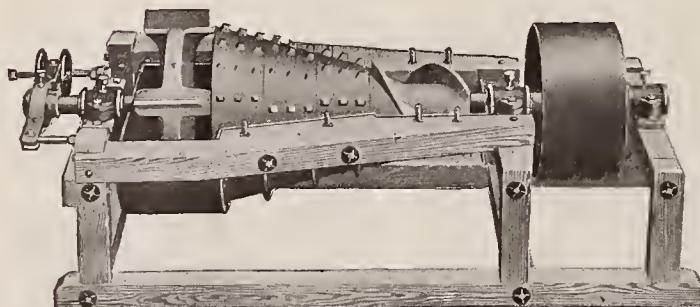
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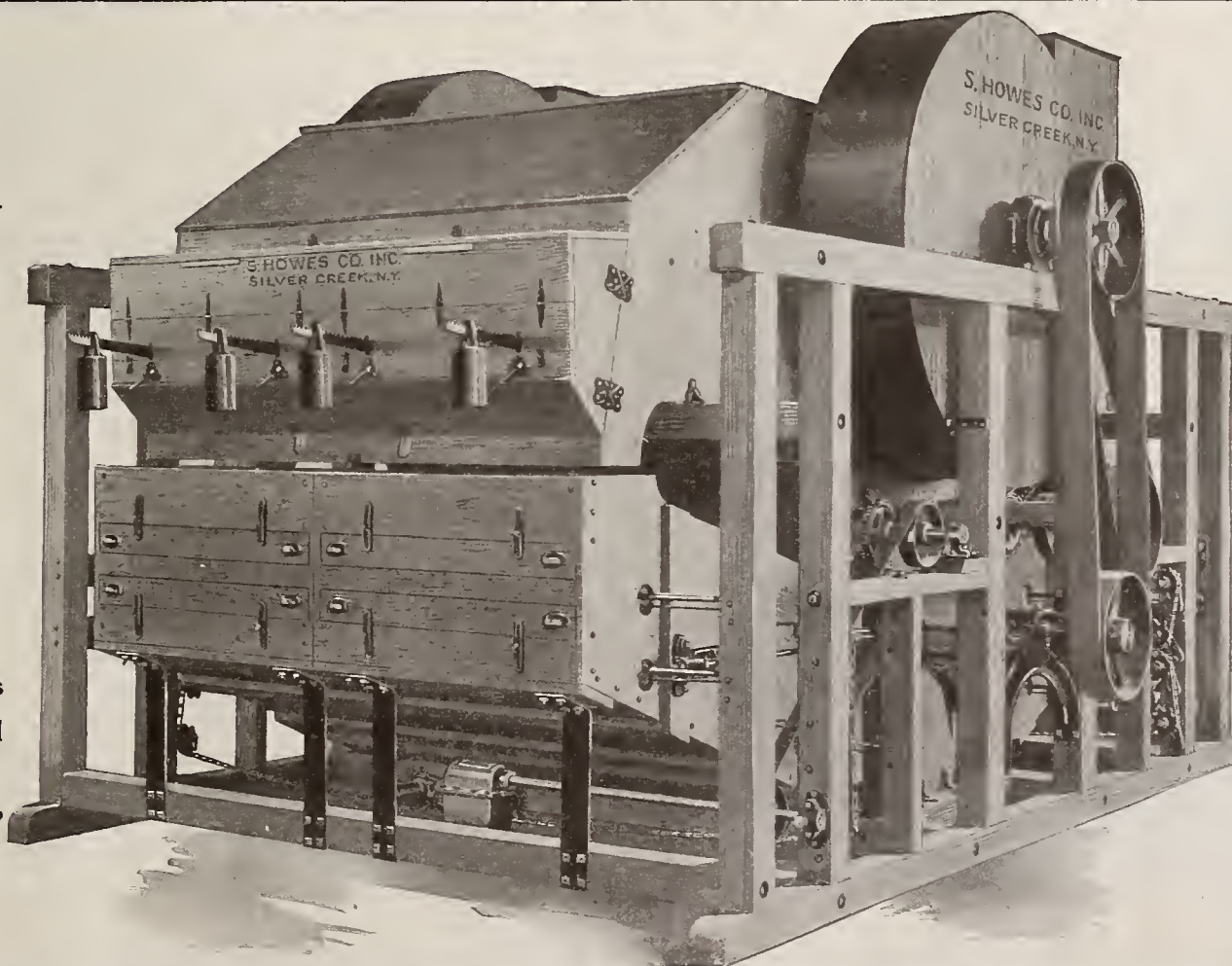


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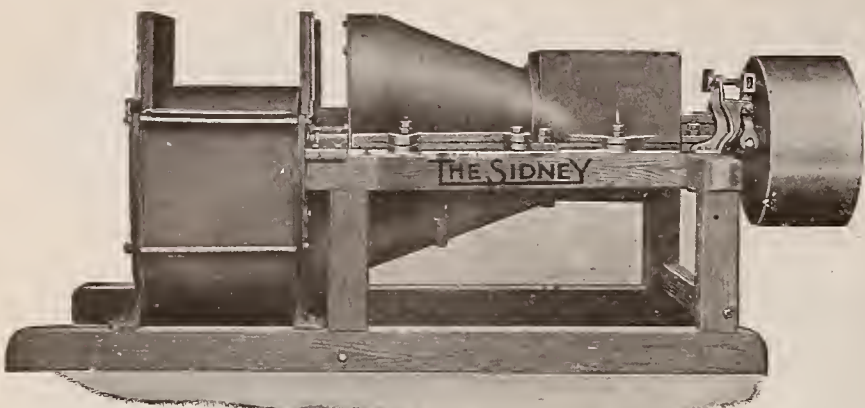
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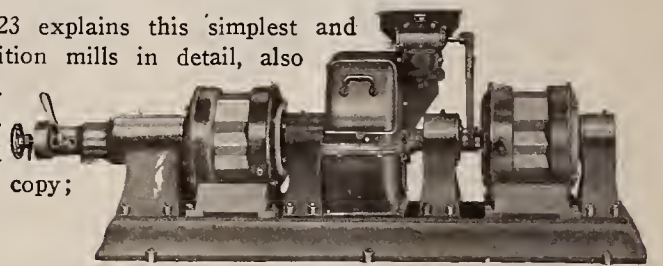
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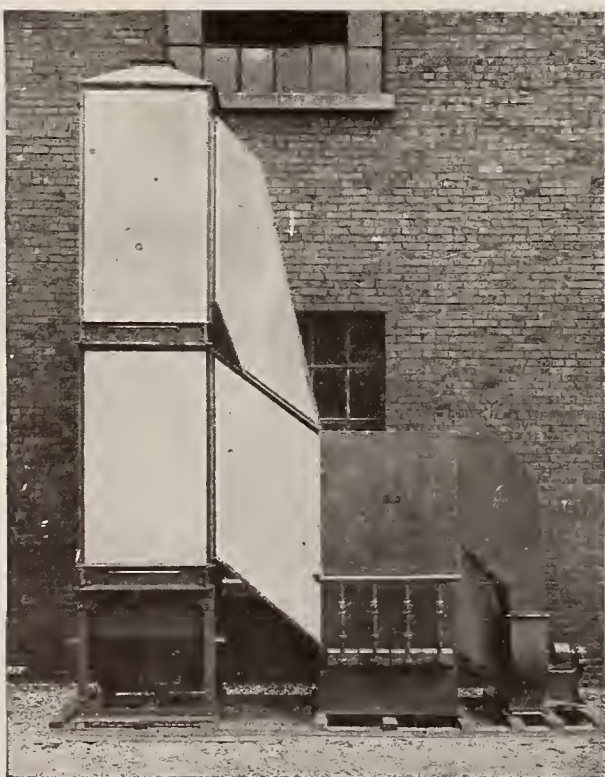
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The accompanying illustration shows our smallest portable drier and cooler. It has an hourly capacity on wheat or corn of 30 bushels per hour. It stands 14 feet high, is 10 feet 8 inches long, and 2 feet 9 inches wide. The entire apparatus is built of the same material and gauges as our larger driers and is a practical machine in every respect. Send for catalog 26.

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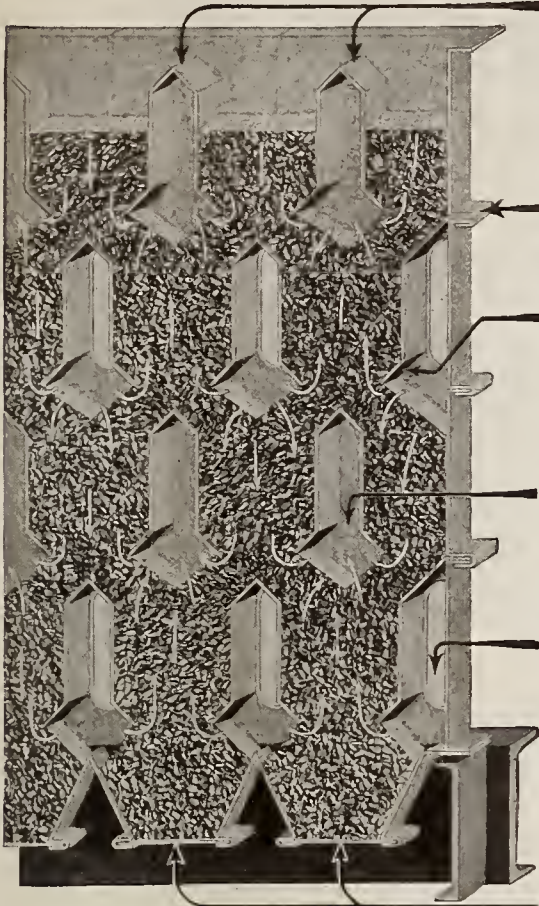
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The Grain Column

Randolph Grain Drier

WIRE PHONE

With a positive circulation of air through both drier and cooler.



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3rd.—The bottom part of every duct, either intake or exhaust, is flanged to a 45 degree angle. This supports the grain every 12 inches and keeps it from packing, so that the air circulates freely through all parts of the drier.

4th.—The exhaust ducts are closed at the end next to the fan and are open at the opposite end, so that the moisture can escape and the grain is accessible to the operator.

5th.—There are more intake ducts carrying warm air to the grain than exhaust ducts carrying the moisture from the grain. This causes a uniform pressure throughout the grain column and a positive circulation of warm air.

6th.—Each column of grain is controlled by a valve at the base of the drier and also at the base of the cooler. This makes a uniform flow of grain.

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Write your insurance company or this office for standards and estimates of insurance saving.

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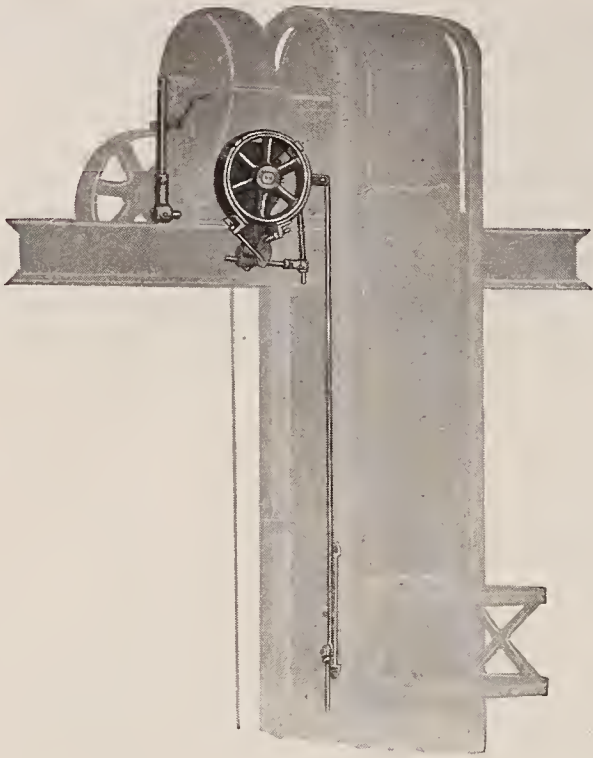
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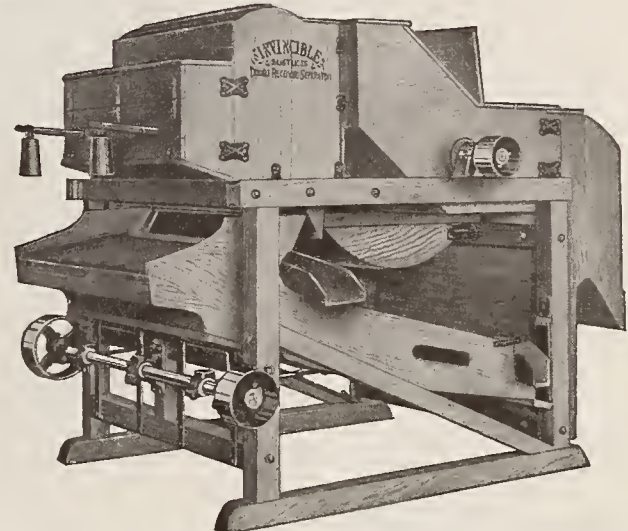
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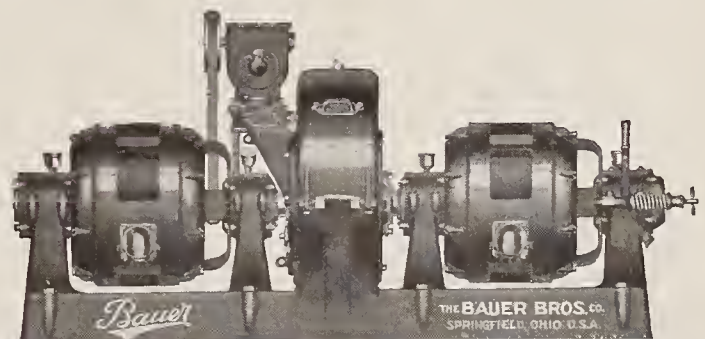
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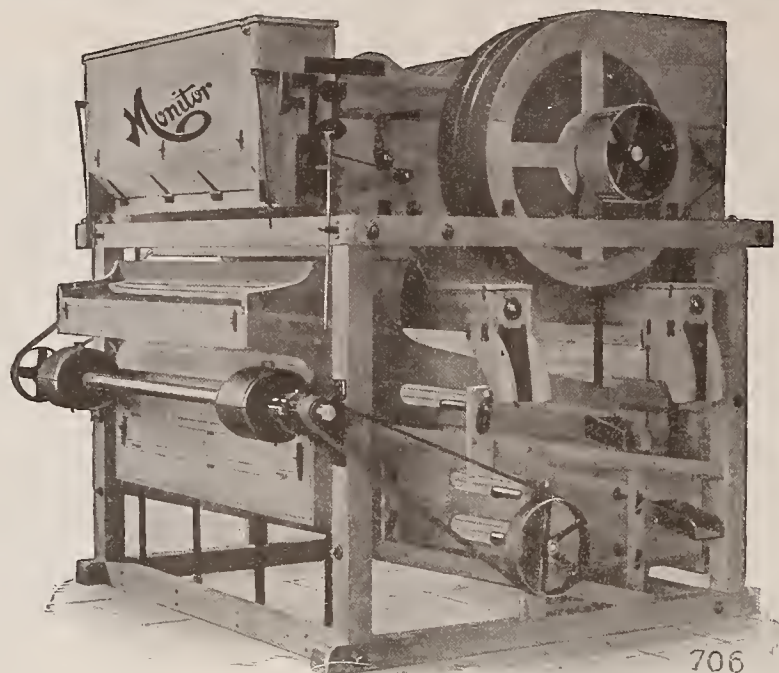
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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



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Subscription price, \$1.00 per year.

English and Foreign subscription, \$1.75 per year.

Established in 1882.

VOL. XLII

CHICAGO, ILLINOIS, APRIL 15, 1924

NO. 10

A Large Plant Devoted to Flax Seed

Flax Elevator and Linseed Oil Mill at Newark, N. J., One of the Many Activities in which the Pittsburgh Plate Glass Company is Engaged

THE growing and handling of flax is an industry of large proportions in this country. Minnesota and the Dakotas have been extensive producers for years and now Nebraska, Montana and even Colorado are finding that the crop is a valuable one in a rotation program or when planted with wheat. In spite of increased production and high prices, however, the supply does not begin to take care of domestic requirements. In

concrete dock which was built along the river front. The elevator, oil mill, refinery and warehouse were designed, constructed and equipped by James Stewart & Co., adhering to a very stringent set of specifications as provided in the contract.

One large building, 110 feet long, 66 feet wide and four stories high, includes the oil mill, refinery and warehouse. This unit is of modern design and

some tanks in separate fireproof rooms, the addition to some tanks of mechanical agitators, and the introduction of ventilating systems.

A new type of marine leg, of the balanced type, was designed and built by the engineers, with machinery furnished by the Webster Manufacturing Company, motors by Fairbanks, Morse & Co., and silent chain drives. The main features of this marine leg are remarkable range of dip and econ-



PITTSBURGH PLATE GLASS COMPANY'S LINSEED MILL AND ELEVATOR, NEWARK, N. J.

1922 for instance we produced 8,029,000 bushels of seed and imported 13,632,000 bushels, so there seems to be opportunity for a material expansion in the production end.

Linseed oil is used in many industries and one of the large consumers of the oil is the Pittsburgh Plate Glass Company whose plant at Newark, N. J., is one of the most modern and complete for extracting oil from flax seed to be found in the country. The paint factory which the plant will supply, will be one of the largest in the country.

The new plant has been erected on a reinforced

has had the benefit of all latest structural improvements, such as daylight factory sash and first class reinforced concrete construction.

The oil refinery has been equipped with a special view to its suitability for turning out the oil needed in preparing paint and varnish. Some of the tanks are furnished with steam coils for boiling the oil and others are provided with lead-lining to take care of caustic and acid processes sometimes used. Other special installations were made to take care of the peculiar requirements of paint and varnish production, including the locating of

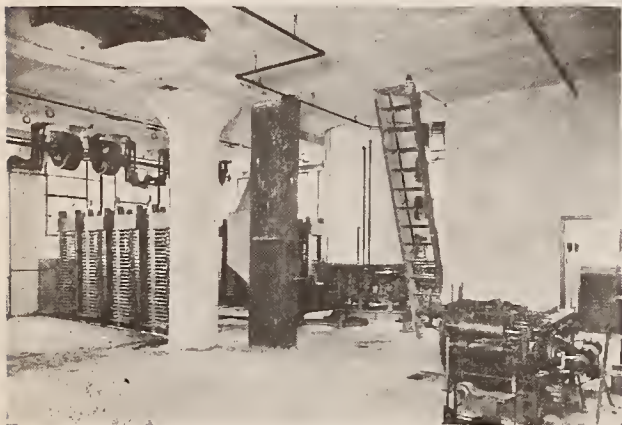
omy. It has a capacity of 4,000 bushels per hour and is operated by means of a single ball-bearing motor located on the balancing truss, in a protected enclosure. The shovels are driven from the head shaft and are mounted on a framework supported off the leg casing. The apparatus is electrically operated by a push-button control.

A hand-driven winch lowers the leg into the ship or barge alongside, and it discharges into a triple telescoping spout. This latter in turn discharges into a conveyor under the dock and it conveys the grain to the leg in the elevator. The

basic intention in designing this mechanism was to provide for handling large consignments of flax as they arrived from Argentina or other foreign countries, at the same time having as small an investment as possible during its inactive period.

The flaxseed is conveyed by a screw conveyor from the marine leg to the loftier leg, by which it is elevated to the receiving garner. Here it is dropped into the 500-bushel Fairbanks Hopper Scale, from which it is in turn spouted to four 25,000-bushel bins, or any of the 4,000-bushel bins, of which there are three, above the Monitor Flax Separator.

All of the bins are equipped with a Zeleny Ther-



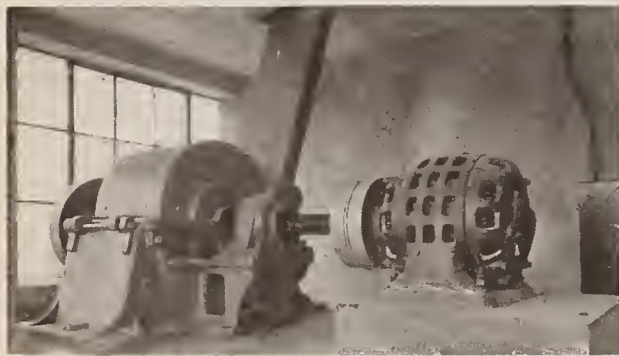
VIEW OF THE OIL PRESSES AND COOKERS

mometer system which keeps a perpetual register of the temperature in each bin at all heights. This gives instant warning of any of the flaxseed beginning to heat, as a glance at the register shows if the danger point is being approached. The system is a constant check on the condition of the seed in the bins.

The corner bins are 19 feet inside diameter, and are set six feet apart. By closing the wide opening between with four outer walls there has been formed a large cross-shaped space within. Two walls have been built to divide this large space, each wall connecting the opposite corner bins diagonally; and the four large interstices so formed were again divided horizontally half way between the top and bottom, making eight bin spaces.

The lower half is closed off into a triangular bin by a wall in the case of one of these interstice bins, and the remaining space is used for housing the elevator leg and stairway, the triangular bin being set aside for screenings. The working floor is located with its cleaning machinery at the half-way division of the interstice bins. This makes it possible to clean 12,000 bushels of flaxseed without using the elevator leg.

Clean flax is elevated and stored in the bins or weighed and spouted into the mill bins, from which bins the flax is spouted to an automatic scale



MOTOR DRIVING A CAKE CRUSHER

located in the mill above the rolls. From the scale the flax is spouted to six stands of rolls.

Screw conveyors are used for collecting the ground flaxseed from the flax rolls, and it is conveyed to the cookers of which there are two. Hydraulic cake formers remove the meal from the cookers. One of the formers is located adjoining each of the cookers, and the cakes are removed and put into the presses. There are 16 of these presses.

Adjacent to the presses there have been installed a floor flush platform type dial trucking scale for weighing the cakes, a cake trimmer for trimming the oil cakes, and a hydraulic packer for

packing the cakes into bags. The excess portion of cakes which have been trimmed is re-elevated by a special leg and goes direct to the cookers.

After the oil has flowed from the presses it is piped to the scale tank, and then either to the process tanks or the storage tanks according to the necessities of the occasion. There are three 1,000-bushel scale tanks for weighing the oil. One of these is for weighing the oil from the presses, one for acid and caustic refined oil, and the third for raw and boiled oil.

In the oil refinery there are 16 5,000-gallon storage tanks for storing the oil, in addition to two raw oil storage tanks, each of 7,500 gallons' capacity. These latter are on the top floor of the refinery, and from these the oil passes through the filter presses by gravity. One other 5,000-gallon tank is located on the top floor for raw oil for the second process of filtration. Several outside storage tanks have been placed near the refinery, and finished oils are pumped from the refinery over to the paint and varnish plants, via an underground system. Additional equipment in the refinery includes four 5,000-gallon agitator tanks and an emulsion tank of 2,500 gallons' capacity.

All the units in the plant are of individual motor drive. The motors have ball bearings furnished by Fairbanks, Morse & Co., and the silent chain drives furnish the transmission. The marine tower was supplied by the Webster Manufacturing Company, the oil pumps by the Allis-Chalmers Manufacturing



MARINE ELEVATOR IN NEWARK PLANT

Company, and the steel legs, spouting, transmission and refinery machinery came from the Weller Manufacturing Company.

C. H. Hall was in charge of the construction work for the owners and V. K. Boynton was the engineer. The operating responsibility is that of Harris G. Nelson, general superintendent of oil mills for the Pittsburgh Plate Glass Company. Harold K. Shoop is superintendent of the new plant.

The elevator is 160 feet in height and has a capacity of 125,000 bushels. The entire building, like the rest of the plant, is provided with an automatic sprinkler system, and a steel tower has been located on top of the warehouse for use in conjunction therewith. This is a 35-foot tank with a capacity of 20,000 gallons of water.

Most of the outgoing product will be shipped via water and facilities for this purpose have been provided with a view to greatest efficiency, and in addition there is, of course, a railroad track and loading platform. A barrel storage and cooperage department are located in the basement of the refinery.

This linseed oil plant on the Passaic River is complete in itself with the oil mill and storage elevator, and has been erected as one unit of what is intended to be the largest paint and varnish factory in the world. It has been the aim of the Pittsburgh Plate Glass Company and their contractors and engineers to make of this plant the last word in modern construction and operating efficiency.

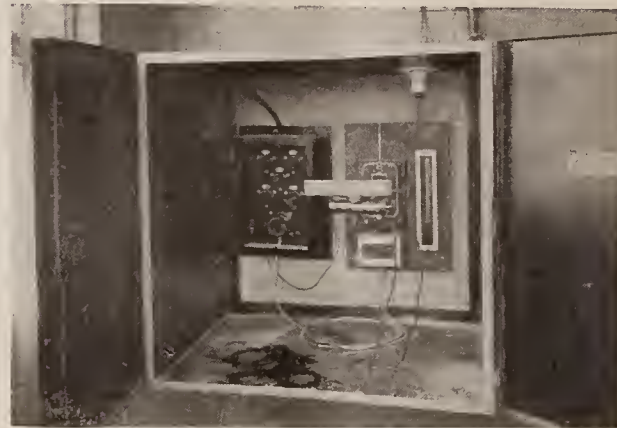
WHAT DO YOU THINK OF LIGHTNING?

BY H. C. LEE

of the Mutual Fire Prevention Bureau, Chicago

Did you ever seriously consider the possible danger to your elevator from lightning? Do you know that lightning caused more fires in elevators in 1923 than any other known cause? And do you know how comparatively easy it is to guard against?

We are all familiar with the saying that "opposites attract." We see it everywhere in life. It is the answer to the question of what makes lightning



ZELENY THERMOMETER SYSTEM REGISTER

strike. Due to some phenomenon on which authorities disagree, during a storm the clouds become heavily charged with electricity. At the same time the ground underneath becomes charged with electricity. However, these two charges are not alike. They are opposites, one being what is known as a positive charge, while the other is a negative charge. These two charges are built up to the point where the attraction becomes so strong that it cannot be denied. They unite and the act of uniting causes what we know as lightning.

Now, just how does a good lightning rod installation protect a property? First please get away from the idea that lightning rods attract lightning. They do not attract lightning. On the contrary they prevent a lightning stroke by removing its causes. As said above, a lightning stroke is caused by the attraction of a positive charge in the clouds for a negative charge in the earth, which charges gradually accumulate until they are strong enough to overcome the resistance of the air and meet in the form of a lightning stroke. The lightning rod drains off the negative electricity in the building and in the earth beneath it by allowing it to escape from the air terminals or



MONITOR FLAX CLEANER

points. In this way it prevents the charge in the building and ground from becoming powerful enough to pull down the charge of electricity from the clouds.

Failure is usually well advertised. It is sometimes said that lightning rods attract lightning, and the statement is undoubtedly based on some actual occurrence of lightning having struck a rodged building. One such report came in last year, but our engineers made investigation and

found that the points had been broken off and one ground removed before the building was struck.

Although they have paid 636 lightning losses in 15 years, the Associated Flour Mill & Grain Elevator Mutual Insurance Companies have never yet sustained a lightning loss on a properly rodded building, conclusive evidence of the protection which such a system affords.

The following gives a general outline for the rodding of elevators and warehouses. For more detailed information you should consult your insurance company.

Grounding: This is the most important part of the system and care must be taken to see that it is done properly. There are three recognized methods. (1) Attached ground connection to a water pipe. (2) Attached ground connection to a rod driven into permanent moist earth. (3) Attached ground connection to copper plate buried below the moisture level.

Conductors: The conductors or rods should be of copper, weighing not less than three ounces per foot for buildings less than 60 feet high, ground level to plate, and not less than six ounces per foot for buildings over 60 feet high. The rods should be loosely woven or stranded in such a manner that there will be considerable give and take, so that they will not be misplaced by the settling of the building.

Air terminals: The terminals should in general not be more than 25 feet apart. In addition they should be placed upon all high and prominent parts of the roof such as cupolas, chimneys, turrets, ventilators, etc.

On buildings which are completely iron clad, that is, sides, eaves, cornice and roof, a very effective protection against lightning may be obtained by grounding the metal siding on all four corners of the building. This grounding should be done with much care as the entire effectiveness is dependent upon it.

Again we repeat that lightning protection costs very little and is very effective. Your insurance company will be glad to give you any information you may wish regarding a standard installation. Think over the losses from lightning which you may recall. It may be your turn this year if you do not take steps to prevent it.

AMENDMENT TO BILL OF LADING ACT

An amendment to the Pomerene Bill of Lading Act of August 29, 1916 has been introduced by Senator Fess of Ohio. The proposed legislation is directed toward amending and supplementing several important sections of the original act.

The new wording of section 14 would authorize issuance of a new order bill to replace one which is lost, destroyed or stolen; or the delivery of goods upon proof of loss, destruction or theft of the original, the giving of an indemnification bond to protect the carrier, and payment of the carrier's reasonable attorney's fees and costs. The section also specifies that the execution of a new bill does not relieve the carrier from liability to the holder who may have obtained the bill but who has not had notice of the proceeding.

Under section 20 the use of words indicating shipper's load or count is forbidden when goods were loaded at public team tracks or public loading platforms if the carrier has had notice by the shipper giving reasonable opportunity to count or weigh.

Section 22 is changed in the proposed amendment in its interpretation of the carrier's liability and supplements the existing ruling.

Under section 29 it is provided that a billing may be transferred by the holder by delivery, accompanied with an agreement to transfer the title to the bill or the goods represented thereby. It further states that a straight bill cannot be negotiated and that endorsement of such a bill gives no additional rights to the transferee.

This amendment was sponsored by the American Bar Association and Francis B. James was the chairman of the Association's Committee on Com-

merce, Trade and Commercial Law when the bill was drafted. The proposed measure carries a proviso that it is to become effective the first day of January following its passage. In one sense, the bill may be regarded as supplementary and partly confirmatory of the original act which was fathered by Senator Pomerene, who was Senator Fess' predecessor.

WHEN AND WHY CARS LEAK GRAIN

BY J. A. SCHMITZ

Weighmaster, Chicago Board of Trade.

When cars leak grain. Leakage is most prevalent (a) during scarcity of available cars; (b) during labor troubles affecting car repair forces, and (c) during periods in which small grains (wheat, rye and flaxseed) compose the bulk of grain shipments.

Why cars leak grain. The principal factors involved in the causes of leakage may be described as follows:

(a) Unsuitable cars. Unfit cars are sometimes pressed into the bulk grain service, especially during extraordinary demands for cars; and also, when labor troubles have materially affected the condition of cars through lack of needed repairs.

(b) Superficial inspection. Some car boxes have small cracks and crevices in them so located that they are not readily discernible without extraordi-



J. A. SCHMITZ

nary inspection, the overlooking of which may cause the smaller grains (wheat, rye and flaxseed) to leak out of the cars.

(c) Roughly handling cars. Cars are often roughly handled in switching, needlessly, sometimes causing leakage of grain at, and over grain doors, and at different parts of the car box.

(d) Samplers entering cars. Grain is often loaded to a height that makes it difficult for grain samplers to enter cars without first removing or disturbing top boards, or top door. Oftentimes such boards or door are not effectively replaced, or not replaced at all, with the result that grain may leak over, or around, or between the grain doors or boards.

(e) Uneven loads. Also, unevenly loaded grain sometimes shifts or levels when cars are roughly handled, which may cause leakage over doors.

Remedies for leakage. Aside from the conditions that are beyond the control of those concerned, in this leakage problem, such as strikes, car scarcity, and accidents, there are certain general remedies that may be applied with profitable results as follows:

(a) Duties of the railroad car repair-man. More intelligent and painstaking work on the part of car repair-men in fastening end and side sheathing boards to the belt rails and sills; and in inspecting and overhauling the triangular protecting strips known as "grain strips" that are fastened to the floor at the junctions of the end and side sheath-

ings behind the inside linings. These strips vary materially in size. The carriers could, with profit, adopt the larger of these for all their cars, as the small sizes warp and twist badly, and do not function well.

(b) Duties of the railroad car inspector. Better judgment and more thorough inspection by carriers in selecting cars for bulk grain loading.

(c) Switching crews should co-operate. More care on the part of switching and train crews in handling, switching and assorting cars. Rough handling of equipment, by engine and gravity track, is a cause for many of the leakages that occur at and over grain doors, and at car boxes.

(d) The grain loaders inspection of cars. More thorough inspection of cars (inside and outside) by loaders, in order that they may better determine the co-operating needs which vary in the different cars.

(e) Inspect grain doors after samplers. Better control of conditions conducive to leakage that may be brought about by grain inspectors, samplers, or others entering cars at loading and unloading points. No outside car door should be closed after samplers without first inspecting top of grain doors where entrance to car was had.

(f) Leveling high spots. Also, any high mounds of grain in a loaded car should be leveled down to reduce possible hazard of shifting, or levelling which, in turn, may cause leakage over doors.

A careful analysis of these remedies for grain leakage will, I am persuaded, convince any practical man in the field that strict compliance with the above suggestions should go a long way toward reducing leakage of grain from cars.

"JIM DUNN"

BY HOOZUS

Jim Dunn, who runs the elevator at Sperry Siding, says: "Some fellers jest can't seem t' get it int' their heads that this here elevator bizness is a'changin' all th' time. Jest between you an' me an' th' driveway, I'd a heap sooner have it th' old way, but I'm a'tryin' t' keep up with th' times.

"Ol' Bill Keller was a'sittin' around, a'burnin' up my terbacker, th' other day, an' finely he says t' me, he says: 'Dunn! it looks like these here farmers' elevators was a'sellin' 'bout ever'thing. Seems t' me they oughta put up a big sign: "General Merchandise," an' down in th' corner, in little letters, grain took in too'".

"Well, I says t' Bill, I says: 'Bill! I been in this here elevator bizness a good many years now, an' I reckon it's too late t' switch, but if it means turnin' th' ol' shack int' a department store, I can put on a split-tail coat with th' rest an' say: "Step this way ladies, th' dressgoods counter is jest around t' th' left o' th' hopper." When Jim Dunn quits th' elevator bizness, Bill, ya'll be a'readin' a funeral notice 'bout th' next day.'"

LITTLE TIPS FROM "JIM DUNN"

A farmer isn't th' only feller that intended t' sell when th' market was up, but th' ol' mare had a colt or something.

This is th' time o' year ya wish ya had fixed that leaky roof when th' weather was nice an' it wasn't hurtin' nuthin'.

When there isn't ennything else t' do, ya can allus think. Don't think back. Think ahead,—an' think hard.

If ya're givin' a farmer your opinion of what th' market's a'goin' t' do, ya better put a Vanderlip clause in it. It might turn out t' be something different.

There's still jest as much money t' be made in th' elevator bizness, only half th' elevator men are a'wonderin' if th' other half ain't a'makin' it all.

Ya can allus get a real kick outa th' P'lice Gazette an' such; but if ya want t' keep in touch with th' grain bizness, ya gotta take a trade paper,—an' read it.

Th' only time some elevator men see a broom is over their shoulder when th' wife's a'chasin' them.

Hard work used t' be th' thing, but it doesn't go in th' elevator bizness to-day. Get all th' improvements ya can. Th' farmers like t' see th' wheels go round.

Hints for the Elevator Millwright

Some Details in Maintenance and Elevator Repairs Which Facilitate the Daily Routine of the Millwright

By OLD TIMER

THERE'S too many ups and downs in elevator millwrighting," said Big Ben as he laid out tools for re-aligning a head-shaft in the top of the house. "They put man-hoists in flour mills but I don't remember seeing very many in grain elevators, where everybody can ride 'shank's mare' up as well as down. And it doesn't tire a man so much to climb as it does to go down, 'specially if he is 'packing' a 60-pound box of tools."

But "Big Ben" didn't lug any tools up and down, —not to speak of—; he had rigged a sort of counter-weighted "dumb-waiter" in which he could place his tool box and hoist it by hand to the top of the house or to any intermediate point, either from below, above, or at one of the mid-landings. The only thing he had to buy, was the 350 feet of five-eighths hemp rope, and he jollied the Old Man into paying for that.

Bill found that the head shaft of the receiving elevator had "fetched away" and had gotten badly out of alignment. He figured that a high wind had "sprung" the building in which the elevator head was located on top of the main elevator building. To make the elevator belt track properly, Bill had to move one end of the head shaft all of two inches. He had tried before to align the head shaft of that elevator by means of two plumb bobs, suspended by long lines from a straightedge in the top of the house, but even on a still day, there were so many up-rising and eddy currents in the elevator well that the plumb lines told nothing but lies!

Bill had rigged up something which worked well for that long distance aligning business. He had made up a 10-foot straightedge and painted it white and fastened it in the middle of a wide board which was painted black. When Bill found that elevator head pulley out of whack, he placed the blackened board on the floor beside the elevator and trued one edge of the white straightedge with the elevator foot shaft. Then Bill connected up two incandescent lamp extensions and placed the lamps at each end of the straightedge, in line with the working edge and carefully shaded the lamps so no ray of light could reach upward.

Bill then went up to the head shaft, or rather to a few feet to one side of it, the white straightedge being located to one side, where there was a fair view of it from the top of the elevator well, if it could be called by that name. Bill squinted down past the straightedge at the top of the house and juggled that straightedge until it laid fair with the brilliantly lighted straightedge below on the house floor. Then Bill clamped the upper straightedge and began moving the elevator head shaft back into alignment, as revealed by the straightedge beside the shaft.

During the rebuilding of a portion of the elevator, Bill was in charge of the work and hired several millwrights to help him. Some of the new men were O. K., but others were evidently N. G. and were continually pestering Bill for small increases in pay. Bill kept putting them off for a few days, until he had sized up a man and his work and found both to be unprofitable investments. Then, next time the man hit him up for more pay, Bill would say:—"Why yes, I'll be glad to pay you all you are worth and to keep you as long as you earn it!" Next day, the unprofitable workmen would get his time and be laid off, wondering what his pay had been raised for. After a few happenings of this kind, Bill was not bothered by petty petitioning for increases of pay.

Bill had a lot more trouble with some of the new men who proved to be regular tool borrowers. They each possessed a hammer, axe, saw and monkey wrench, but that was about the limit of their tools. When one of these men came to Bill to borrow a thirteen-sixteenths bit or an inch and a quarter chisel, Bill would ask:—"What pay are you getting?" If the would-be borrower said—

"\$3 a day," Bill would reply:—"I never lend tools to a man who is getting less than \$5 a day. A man who doesn't earn that amount is not millwright enough to take care of good tools."

Should the workman reply to Bill's question, that he was "getting \$5 a day," then Bill would reply:—"I never lend tools to a man who is getting over \$4 a day, for reason that a man earning that amount, is able to have tools of his own!" Bill surely was "wise" on the tool lending situation.

"Oiling around" in the top of the elevator house, proved to be something of a gamble, and Bill set himself about cleaning up that matter. There were some bearings which were rather hard to get at, and unless there was plenty of light, a bearing or two would be missed occasionally until a squawk or a smell revealed the existence of a fire risk. Bill tried all manner of things, but the use of long extension cords proved dangerous. The cords would occasionally get caught and be broken. The lamps would be smashed, even when enclosed in a wire cage and also inside of an outer protecting globe.

One day, Bill happened to be upstairs and saw what might have been a bad accident. The oiler was working his way along, extension lamp in one hand, oil can in the other. He made a misstep, and in trying to recover his balance, struck the lamp smartly against a horizontal timber, sending flying a small cloud of fine dust. The wire cage was smashed and both globes broken by the blow of the lamp against the timber and Bill saw a blaze of light as the puff of dust was ignited by the breaking lamp. Luckily, the dust explosion didn't propagate and the flame died out. But it set Bill to thinking mighty hard and after a talk with the Old Man, Bill conduit-wired all along the shafts in the top of the house, and elsewhere as well, and put in a permanent line of lamps which would cast light where it was needed during oiling around operations and also during repairs.

The new lighting lines were erected in short sections, each group of lamps lighting certain machinery which should be oiled in sequence. There were no snap switches on these lamps, therefore they could not be turned off or on, save by unscrewing the lamp globe, and as that was inside of an outer glass and also a wire cage, the globes were not meddled with. Bill placed a convenient wall switch for turning on each group of these "oiling-up" lamps so that as he came along, the oiler could light up a group of bearings and could also turn off the lamps as he went away again. Where it was convenient to approach a lamp section from one direction and to leave it in an opposite one, Bill installed two switches and placed the group of wires in a three-wire circuit in such a manner that the lamps could be turned either on or off from either snap switch, so the oiler could approach in either direction and leave the other way, lighting up before him and turning off the lamps as he left, without having to go over the same ground twice.

There has been no sign of fire-accident in the elevator since Bill rigged the "oiling-up" lamps, and he finds them very valuable during repairs. Before putting in the new circuits, Bill tried two schemes. One was fitting the oiler out with a good rugged flash light. But it didn't prove at all satisfactory. The batteries were forever giving out and there was not light enough to get around with speedily and comfortably. Bill submitted, however, that "flash lights might work half way decent if he could find an oiler who had three hands, but that flash lights were a nuisance to a man with only two dukes!"

Bill also tried that form of electric lantern in which two or three full grown dry cells furnished the lighting current. This scheme Bill found to have all the disadvantages of the flash light

method, with the additional one of, as Bill put the matter:—"lugging around a dozen pounds of junk!" The dry batteries were pretty heavy, and it was wonderful how the oiler managed to break them down or burn them out so quickly! Then, Bill put in the oiling-lights sections, and there has been on more trouble since then in his elevator head house.

GRAIN SHIPPERS LOSE APPEALED RATE CASE

The United States Circuit Court of Appeals has reversed a decision of District Judge Woodrough of Omaha, and held that the Interstate Commerce Commission had power to provide for reparation to shippers but that as it made no such provision Judge Woodrough erred in instructing a verdict for the shippers.

This case involves more than \$1,000,000 in rate litigation between grain shippers and railroads, and centers around a grant by the Commission in 1920 of an increase of 33½ per cent in grain rates making the rate between Omaha and Pacific Coast points 81½ cents, and subsequently reducing the increase by one-half. There was two months of heavy grain shipping in the two months period between the original rate change and the reduction. Shippers paid the increase and then filed suits against the carriers for rebates, resulting in the present litigation.

HINTS FOR THE ELEVATOR MAN

BY B. SCOTT HILL

THE INSURANCE INSPECTOR

Don't just get ready for the insurance inspector a few days or a few weeks before he is due to come around. Get the habit of being ready for him at any time. It will help wonderfully in the general appearance of your elevator, and will add much to your self-respect. When you form the habit of keeping everything in order, you will be quick to notice when any minor part is beginning to give away, which, if repaired at once, may save you more expensive outlay later on.

The very nature of the elevator business is apt to make one careless of dust and dirt and give as an excuse that it's no use cleaning up, as it will only be as bad again in a short while. That is not true, as a visit to many well-kept elevators will prove. It's purely a question of habit, and once you've made up your mind to keep your house clean and in good order, and follow it up religiously, you'll be surprised to find how easily it can be done and what a lot of benefit will accrue to you as a result.

The writer has looked after line houses for years, and has had opportunity to study the different methods of his men, and he usually found that the neat and methodical manager was the one who had the smallest shortage and the least amount of expense at the end of the year.

QUESTIONS AND ANSWERS

H.E.B.—Before allowing a claim for shortage, where the grain has been sold on a delivered basis, you should ask to have the paid freight bill sent to you. Then, if the amount of freight paid is less than you allowed on your invoice, you have the right to deduct this difference from the amount claimed as shortage.

R.A.J.—In weighing grain into cars, over a hopper scale, you should never allow a draft of a certain amount to immediately follow another draft of a similar amount. In the event of a claim for shortage it will be assumed that you put one draft down twice. A good idea is to place a number before each draft on your tally sheet, starting with "1" and continuing in numerical order, so that the last number will represent the number of drafts you have weighed. It isn't possible to have too many safeguards in weighing.

THE CARRYOVER at the end of the year probably will not be as great as it seemed a few months ago that it might be; and the outlook of the market for our remaining surplus of wheat for this year seems slightly better than it was a few months ago.

Grading Grain at Superior

The Grain Inspection Laboratory of the Wisconsin Grain and Warehouse Commission

THE Wisconsin Grain and Warehouse Commission, located at Superior, has an excellent laboratory operated by the Inspection Department for sampling and grading grain. Having made a careful study of their requirements, they have built an efficient organization and secured necessary equipment for the laboratory they had planned.

After reaching the grading room, a sample is passed through a Boerner Sampler and Mixer and cut to 1,000 grams. If wheat, it is run twice through an Emerson Dockage Tester, and if rye, it is run twice through a Cowan Dockage Tester. Both machines are used by the Wisconsin Commis-

sion with the Cowan Tester having their preference for rye. The separations are examined at the grading table and if there is any grain of the same variety as sample it is picked out. The clean grain and fine screenings are both passed over Government regulation sieves, and the test weight per bushel is determined.

In the laboratory the latest type of Boerner Weight per bushel apparatus is used for this weight test. The sample is then passed through a Boerner Sampler and cut to two samples of approximately 50 and 25 grams. The former sample is used to determine the foreign material other than dockage, distinction being made as to cereal grains and other than cereal grain. The 25 gram sample is used to determine the heat damaged kernels, damaged kernels apart from heat, dark hard and vitreous,

yellow, mottled and starchy kernels and other varieties of the grain being graded.

In determining the dockage, both the Toledo Scale and Torsion Balance are used, and for the other determinations the Wisconsin Commission uses the Henry Trommer Scale No. 657 and Torsion Balance Style 5055. The official Brown-Duvel Moisture Tester is also used and the Federal regulations are followed in making tests.

To insure accuracy all tests are taken in duplicate and if much difference is discernible the sample is re-run.

For detecting sulphur grain the specially designed apparatus described in Circular No. 40 of

Government or anyone else may prescribe relative to grading, or equipment for that purpose will be absolutely useless unless an average sample is obtained.

In the case of a carload of grain, it is probed to the bottom in five different places. The sampler empties his trier each time in the sample cloth to determine whether it is an even load. In case of heavy dockage seven probes are taken of each car. When inferior grain or foul seeds are found in a probe, the amount of such is determined by probing around the spot where originally located. After making up his sample and recording necessary information the sampler places the Commission's seal on each car.

In sampling cars of flax, seven probes are taken in different parts of the car, and sieves are used instead of dockage machines in grading.

When sampling grain which is being loaded into boats, samples are taken on the boat deck from



GENERAL VIEW OF THE SUPERIOR GRAIN INSPECTION LABORATORY



TESTERS AND SAMPLE RACKS

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the Bureau of Plant Industry, United States Department of Agriculture is used.

All data is compiled in card form and records are preserved in a unified form by allocating all information regarding each car to a single card, and original samples are retained in bags, the numbers of which appear on the respective cards. These samples are kept available until all questions of grade are settled or the identity of the grain lost.

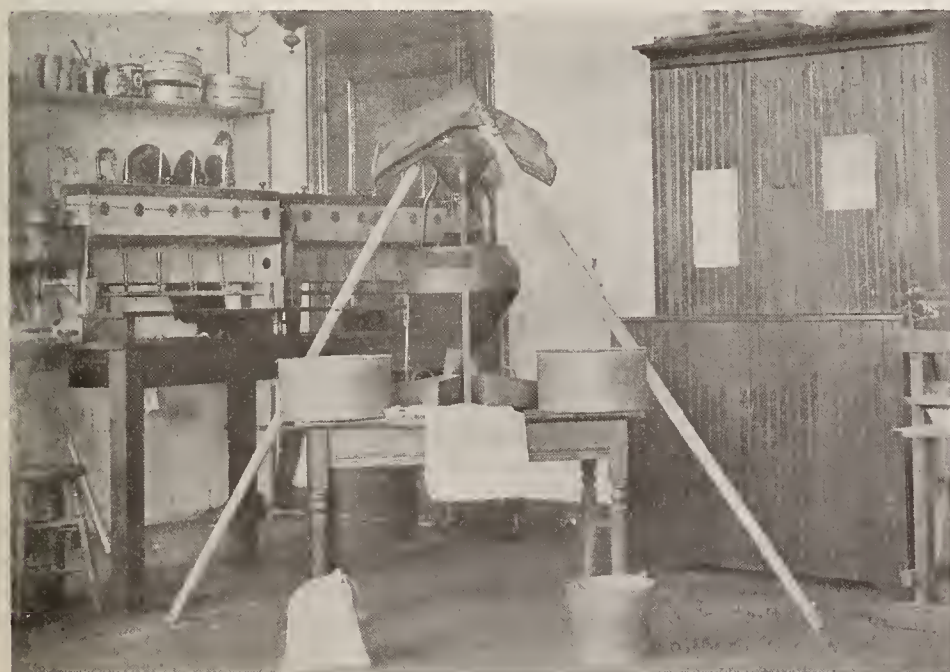
Some idea of the disposition and style of the equipment in the laboratory can be gained by noting our illustrations which represent various features of the state laboratory.

The most vital feature is securing an accurate sample in the first place, one which will show the grain in layers from the bottom to the top of the load. It is obvious that all the red tape that the

streams as they run from the spout to the boat. The type of sampler used is termed a Pelican and consists of a leather pocket 16 inches long by 2½ inches wide and six inches deep, mounted on a steel frame with a wooden handle seven feet long. This will accommodate a sample the full width of the stream. The illustration of boat sampling equipment shows these.

The personnel of the organization is graded in four classes and all those in responsible contact with the work have had to serve their apprenticeship in the ranks. The aim of the commission is to train reliable and efficient men for inspectors by starting them as probers and subjecting them to preliminary training in the laboratory under the chief inspector and his assistant.

The present members of the Wisconsin Grain



BOAT SAMPLING EQUIPMENT



COWAN AND EMERSON DOCKAGE TESTERS

and Warehouse Commission are E. W. Feidler, chairman, Wm. Bradley, and J. W. Conner, and the Commission, through its chairman, is making every possible effort to improve its service to the state and perfect the methods followed.

WORLD WHEAT SURVEY

One of the strongest arguments against the McNary-Haugen bill is a document on the world wheat situation, prepared by the Department of Commerce before the McNary bill was introduced. The world survey does not present an encouraging picture of American wheat export conditions in the future as compared with the past, and it is idle to think that an act of Congress can upset the economic status of world trade.

For purposes of comparison, it is best to consider Europe, exclusive of Russia, as a unit in wheat production. Russian exports prior to the war, like those of other surplus producing countries in the Danube region, went almost exclusively to other European countries. When normal conditions resume in this territory this will doubtless be true again. India is a large producer of wheat but by far the greater part of the crop is consumed at home, exports being comparatively negligible. Leaving out the Russian situation, the bulk of the wheat

possibilities this year it seems conceded that she is recovering gradually in agricultural activity and should be counted upon in the next two or three years to supply a very appreciable amount of wheat and rye for export.

When the wheat needs of Europe are being considered it is necessary to bear in mind possible substitutes. Other things being equal, Europe tries to lower the average cost of bread by the importation of the cheapest foodstuffs. In periods of food shortage, potatoes have been made to serve as a substitute for bread grain. More important to the consideration of the wheat situation is the rye crop. When rye is cheaper the Germanic countries at least will import rye in preference to wheat. Less wheat and rye are being fed to animals and used in industries, and a higher milling extraction is in effect than before the war.

The situation in the principal countries of Europe shows interesting side lights. France, besides having produced 50,000,000 more bushels of wheat than last year, is still extracting larger percentage of flour and compelling the millers to add at least 8 per cent of foreign or substitute flour. Germany likewise reports a large increase and milling on a higher extraction basis. Italy has produced about 60,000,000 bushels more than last year and may reduce her imports to less than 25 per cent of the

ment of our products in international trade compared with those of the other countries.

In the United States practically all the land best suited for wheat has been taken up, and it is a question whether, under the stimulus of greater demand, we are not attempting to grow wheat on land that is ill adapted for that purpose. The American wheat farmer is probably subjected to a more severe competition than are the producers of most other important commodities. Forty years ago the Kansas farmer produced grain on virgin soil, on land where his capital invested was not much over \$5 to \$10 an acre. The Canadian farmer of today is producing under the same conditions which were existent in the Missouri Valley years ago.

It is worthy of note that the average crop for the five pre-war years in the United States was 690,000,000 bushels, or only a little above our present domestic requirement. A long view of American production indicates that our own population increased at the rate of 1.5 per cent per annum and that within 10 years under normal circumstances we should require about 725,000,000 bushels of wheat. The amount of wheat required by the United States at present is approximately 650,000,000 bushels per year. This amount could be produced on about 48,000,000 acres, the average number of acres harvested in pre-war years. A comparison to estimated requirements given above for a decade hence indicates that domestic needs then would be produced by about 56,000,000 planted acres. However, the present requirement for domestic needs necessitates planting 54,000,000 acres, when allowance is made for an average of Winter wheat abandonment of 10 per cent, considering as a basis the fact that the amount abandoned in the 1909-1913 pre-war period was 10 to 13 per cent.

IMPROVEMENT IN GRAIN SITUATION

The German meat and grain situation has been vastly improved in the past three months as a result of the stabilization of the currency and the excessively high taxation of farmers which has forced them to market their products, declares E. C. Squire, agricultural commissioner at Berlin for the United States Department of Agriculture, recently returned. Mr. Squire is conferring with Department officials in laying plans for expanding the service of reporting foreign agricultural developments to American farmers.

The German Government is now promoting measures for increased agricultural production through better utilization of waste land, Mr. Squire indicated. This is especially so of land adaptable for pasture. Some immediate results from this policy are expected, but German officials are agreed that it will be several years before any sizeable increase in production from such lands will be shown.

The large estate farms in Germany have been left practically intact, as even the socialistic element realizes that only by such a course can needed food supplies be assured, Mr. Squire says. Intensive industrial methods are employed on these large farms, some of which run over 8,000 acres. The farms are in charge of experienced superintendents, each farm employing 150 to 200 men. Such farms have their own elevators and power houses, and some of them even manufacture many of their own farm implements.

POSSIBILITIES of increased exports of Canadian grain to the Orient are being looked into by a delegation of Chinese and Japanese now touring Canada, says Consul General Joseph I. Brittain, Winnipeg, in a report just received by the Department of Commerce. It is said that the Japanese representatives of the party are connected with Mitsui Company, of Shanghai, which company it is reported, bought about 300,000 tons of Canadian wheat last year and anticipates heavy purchases in 1924. The party spent considerable time at Fort Williams inspecting the grain terminal elevators. At the present time Canadian millers are making a determined effort to increase their exports of flour to the Orient.



A STEADY STREAM OF WHEAT FROM BUENOS AIRES ELEVATORS

that enters into international trade comes from four countries, the United States, Canada, Argentina and Australia.

In the four years 1920 to 1923 wheat acreage in the United States was 26 per cent more than in the pre-war period. Population increased 14 per cent in the same time. Canada increased acreage 118 per cent and Australia 27 per cent in this interval while a slight decline was experienced in Argentina. A general average of 31.6 per cent increase in world production exclusive of Russia serves in some measure to offset the gap resulting from Russia's decline. While it is true that our rate of export has experienced a small decline, it is still much greater than before the war.

Wheat on the world market is relatively cheap. The average price in Liverpool in 1923 was about 17 per cent above the five-year pre-war average price. This fact appears to be reflected in the relatively larger world shipments of wheat that were made in the six months period ending January 1, 1924. Statistics recently compiled give world shipments for this period as 343,000,000 bushels, or about 5 per cent more than in the corresponding period a year ago.

The exportable surplus of Argentina this year is estimated at 50,000,000 more than last year, and the Australian crop this year is judged to have available for export approximately 70,000,000 bushels. This would indicate material increases in the southern hemisphere, and will in some measure offset the Russian shortage. While there is hesitancy in attributing any estimate to Russia's exporting

pre-war average and maintain the same basis, which is likely to occur.

The factor of enlarged competition is also important. About 70 per cent of the Canadian crop was available for export in 1922, which was more than doubling in a three year period. Considering that out of an area of land suitable for cultivation in Canada only 35,000,000 acres out of 272,000,000 are under crops the possibilities of enlargement are very striking. The Canadian Pacific Railway is offering new land, described as desirable for all phases of mixed grain farming at prices averaging about \$18 per acre, on a 7 per cent 34-year amortization plan. Wheat promises to remain the favorite crop in the prairie provinces for a long while to come.

The problem of Russia's production, becomes complicated because of the lower standards of living of the Russian farmer, which renders Russia a serious competitor at such times as her internal affairs permit of quantitative export. No one can forecast what the situation in Russia may be when that country again becomes a significant factor in the international wheat trade. If present methods should prevail, Russia would be prepared to undersell the wheat from any other wheat-exporting country.

Another important factor having a bearing on competition that American wheat must meet is the international trade balance. The fact that since the war the United States has become a creditor nation, while Canada, Argentina, and Australia are debtor nations, has a distinct effect upon the move-

WELL KNOWN MILL FURNISHER DIES

Within the last month one of the pioneer mill furnishers of Minneapolis, W. J. Fender, died after two years' illness. He had fallen and fractured a hip bone in Buffalo in May, 1922, and he died in the St. Francis Home, at Williamsville, N. Y. Mr. Fender was born in Kingston, Ont., September 14, 1839, and went to Minneapolis in 1867. He invented the Standard Flour Purifier. In 1874 he entered a partnership with J. Cuthbertson, and later was a member of the mill furnishing firm of Gunn, Cross & Co. In 1881 he formed the Kirk & Fender Manufacturing Company, with A. H. Kirk.

In addition to the Standard Purifier, he invented the first cloth automatic dust filtering machine and several grain cleaning machines. Mr. Fender was associated with the Richmond Manufacturing Company of Lockport, N. Y., after leaving Minneapolis, and also the S. Howes Company, of Silver Creek, N. Y.

CORN EXPORTS FROM ARGENTINE

In spite of the vastly greater production in the United States, exports of corn from Argentina have averaged 132,000,000 annually in the three-year period 1920-22, as compared with 116,000,000 bushels from this country, according to statistics compiled by the United States Department of Agriculture. Argentine exports have averaged 71 per



PRIMITIVE METHOD OF CRIBBING ARGENTINE CORN

cent of its crop. Since the war, Argentina has been the most important competitor of the United States in world corn markets.

The world production of corn in 1923 is estimated at 4,202,000,000 bushels by the Department, as compared with 3,972,000,000 bushels in 1922, and 3,904,000,000 bushels, the 1909-13 pre-war average. Production in the United States is more than three times as large as the production in the rest of the world, the size of the American crop being the most important factor in determining the world market price.

Only a small quantity of corn was exported from the United States in 1923 due to strong domestic demand. From 1896 to 1912 the United States exported large but decreasing quantities of corn, and in 1913 imported more than was exported. Exports in the fiscal year 1921-22 jumped to nearly 180,000,000 bushels.

The area now in corn in Argentina is estimated at 8,465,000 acres compared with 7,851,000 acres last year when 153,000,000 bushels were produced. Weather has been favorable to growth so far and prospects are good for a crop in excess of that for 1921 when 230,000,000 bushels were grown, the Department says. The crop will not be ready for harvest for another two months, and considerable change can take place in that time.

Argentine corn recently has commanded higher prices than the American product in European markets, as the Argentine product is dried before being shipped so that the water content when the corn arrives on European markets is less than in American corn. Argentine corn is also sold quality guaranteed on delivery, whereas American corn is sold without guarantee as to condition on delivery.

In the season when old corn is being shipped from the United States and new corn from Argentina, the price margin narrows and sometimes is in favor of American corn.

Demand in Germany for corn to be used to manufacture alcohol has decreased during the past two years on account of large German potato crops. The recovery of European production of other feed crops has also contributed toward reducing the demand for corn in northwestern Europe. European corn exporting is confined to Bulgaria, Roumania, Jugoslavia, and Hungary.

LARGE LOUISVILLE PLANT DESTROYED BY FIRE

One of the worst fires ever experienced in the city of Louisville, Ky., completely destroyed the three buildings belonging to the Early & Daniel Company, grain dealers. The flames broke out on the fifth floor of the principal building, located at Thirteenth and Maple Streets, at about eight o'clock the night of April 4.

It was well after 11:30 before the city fire department was able to get the conflagration under control. Seven men were hurt among the fire fighters, who put up a hard battle, though by 9:30 they had to give up all hope of saving the three sections of the grain plant, and from that time on they devoted their energies to saving the surrounding factories.

The most sensational feature of the fire was the collapse of the elevator. The flames were very nearly beyond reach and its galvanized iron walls had become red with heat. At shortly after 10 o'clock the walls buckled and fell, shooting flames 75 feet in the air, and scattering debris over the adjacent land and buildings. On three different occasions nearby buildings caught fire, but these were controlled without serious damage. Aside from the total wreck of the buildings belonging to the Early & Daniel Company, the only other destruction was that of two freight cars on a siding near the plant.

The origin of the fire has not been determined, except that it is reported by the local authorities to have originated in a vacant dryer room on the top floor of the feed mill. At first the firemen were able to fight the fire from the inside, but the rapid spread forced their withdrawal.

When the elevator caught fire it developed into a huge mass of flames and created a big illumination as it burned like a roaring furnace. Firemen worked furiously, ripping open the galvanized iron sides in order to pour water on the grain and prevent an explosion.

The grain poured through the opening and into the street until the sides had collapsed. Water was almost totally useless and efforts to keep down the flames met with no success. The fire travelled rapidly and in a surprisingly short time the dryer was also a mass of tinder. After the collapse of the elevator and two walls of the main building the fire department was forced to turn its attention to adjoining property to avoid further spread.

The entire traffic division of the Louisville police was called to the fire to keep the crowds in control and prevent interference with the quick operation of fire fighting apparatus.

T. A. Early, president of the Early & Daniel Company, who makes his headquarters in Cincinnati, said that the loss would run to about \$400,000. This includes new machinery and equipment valued at \$100,000, grain valued at a like amount, and the buildings which were acquired last September. However, the feed mill has never operated on full time so far, as the work since the buildings were purchased has centered around installing machinery and making preparations.

The Louisville plant constitutes a branch of the Cincinnati firm, and E. M. Crow is the Louisville manager. He stated that the loss was covered by insurance. He said he had left the mill the night of the fire at 7:45, which is only eight minutes from the time the first alarm was sounded.

The Early & Daniel Company group of buildings in this fire included a building five stories high, which was used as a mill; a six-story building back of it, which constituted the elevator; and a

third, a four-story building used as a dryer. The elevator was of galvanized metal and the other units were of brick construction.

A CONSTRUCTIVE PIECE OF WORK

A great many grain dealers became personally acquainted with George Livingston at the time he was active in the work of assigning Federal grades to grain and his other duties in the Bureau of Markets. At present he is director of the American Institute of Agriculture at Chicago and has begun a piece of constructive work which, if it expands to the proportions that its importance warrants, will mean a great deal to the grain trade.

Mr. Livingston had opportunity for acquiring a vast fund of intimate knowledge on every phase of grain marketing. Like most other men in the Department of Agriculture he acquired a strong leaning toward co-operative marketing, but this theoretical tendency is tempered by his profound knowledge of conditions as they exist, and he knows that "co-operation" is no magic word which will cause profits to appear where none were present before, but that any grain business, whether co-operative or privately owned, can only succeed when it is managed right and where the economic laws governing trade are subscribed to.

For a considerable period Mr. Livingston was immersed in his studying the problems of markets,



GEORGE LIVINGSTON

and during this time he traveled over the entire country absorbing facts and working out phases of this subject. In 1919 he became Chief of the Bureau of Markets, one of the most important branches of the United States Department of Agriculture. He continued in this capacity under three secretaries, Houston, Meredith and Wallace.

Along with his other comprehensive studies Mr. Livingston made a survey of educational institutions and decided that the need for courses in marketing was not being met, and after resigning from the Bureau he commenced calling in agricultural leaders of national reputation to centralize the necessary information. Among the subjects treated expertly at the American Institute of Agriculture under his direction are the following: Federal supervision of grain inspection, management of country elevators, transportation of grain, grain exchanges and how they operate, co-operative grain marketing, how to reduce the cost of marketing grain, the terminal elevator system, financing the grain industry, etc.

In short the grain marketing course covers the field from farm to export elevator and there are many in the trade who could use it to advantage. We are presenting it here because George Livingston is a mighty good fellow, and we believe the Institute offers an opportunity for many dealers to widen their vision and increase the knowledge of the problem of handling grain successfully.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Second Year



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

 Official Paper of the Grain Dealers National Association
and of the Illinois Grain Dealers Association

CHICAGO, ILL., APRIL 15, 1924

THE ROAD TO RUSSIA

SENATOR La Follette has announced his platform as a presidential candidate and it is as pretty a picture of state socialism and political bunk as anyone would wish to see. The Wisconsin Senator is an astute politician and he has incorporated into his credo something which will appeal to almost everyone whose class consciousness is greater than his Americanism. And of course he will dwell on the particular plank that appeals to the audience he happens to be addressing. Unfortunately there are a great many people in the country to whom the part is always greater than the whole; who cannot see the forest because the trees are in the way.

The platform provides for Government operation of the railroads; the creation of super-power under Federal control, which is linked with control of the coal mines and eventual operation of mines and Government operation of all power plants. Even with our limited experience of Government operation, we can easily imagine the cost to the consumer of transportation and power, but the Senator has the affrontery to promise, at the same time, a decrease in taxes. It is to laugh,—especially with his promise of a bonus and a few other expenditures for which we have no money to pay.

He calls for a thorough investigation of the gambling and speculating in products of the farm. In the last 10 years we have had one or more investigations of this subject under way continuously, by congressional committees, the Federal Trade Commission and other experts. Every possible thing to know about grain trading and the trading in other

commodities is known and on file at Washington, so that this appeal to the farm vote is pure bunk.

Senator La Follette also provides for destroying the power of the Supreme Court; the direct election of President; the end of power of injunction over trades unions, and a few other things which, in the aggregate would destroy our present form of government and set up a state of which Russia has recently shown a striking picture. Senator La Follette does not call himself a socialist, but his program would carry us farther than the socialists could hope to do in a generation.

HUMPTY-DUMPTY

REWRITING the McNary-Haugen bill is occupying the time of several members of the farm bloc. Evidently the wide protest against the measure has made some impression on Congress and the questionable constitutionality of the tariff provision, and the more obvious objections which have been pointed out, make the passage of the bill in its original form too doubtful to risk.

Perhaps some of the superficial faults may be remedied in the new bill, but it is doubtful if an attempt will be made to change the principle upon which it rests, putting the Government in the grain business, and that is the quicksand upon which the entire structure is reared. There can only be one end to the business, disaster to the farmer and higher living costs for every one.

The technical objection to the tariff feature of the bill lies in the section which provides that the Secretary of Agriculture may at any time declare the existence of an emergency with reference to any agricultural product, and to fix the price, whereupon it becomes incumbent upon the President to proclaim new tariff rates sufficient to protect this fixed price. This provision may be found to be outside of constitutional law, but no single feature of the bill is within economic law, nor can it be amended to make even a reasonably good working system out of it.

DOING THE IMPOSSIBLE

"IS SAUL also among the prophets?" George N. Peek of the New Moline Plow Company has figured out how much wheat script would be worth under the McNary-Haugen bill. This is something which the best brains in the grain trade, the Department of Agriculture, the farm bloc, ouija boards, and the foremost fortune tellers have been unable to figure out. Our congratulations to Mr. Peek.

He proves that, had the bill been in force last November a farmer would have made a gross gain of 60 cents a bushel or a net gain of 45 cents over the world price. "The script," therefore, according to Mr. Peek, "which the farmer would receive (which would represent the maximum portion of the ratio price which he could fail to obtain aside from the comparatively unimportant expenses of the corporation) would be 15 cents a bushel."

You note his reference to the "compara-

tively unimportant expenses." This, of course, is the joker, for the cumbersome administration of the bill insures an operating expense that would dissolve that 45 cents net, as a tub of hot water would a teaspoon of salt. Mr. Peek may be a prophet, but from this angle he looks much like a merchant who has something to sell the farmer and desires to gain his good will.

TARIFF RATES CONTESTED

IMPORTERS of wheat and flour are reported to be preparing a test case on the new tariff rate which went into effect on April 6. First the constitutionality of the flexible provision of the Act is to be tested. If the Supreme Court decides that a flexible tariff is constitutional, then the manner of arriving at these specific duties will be contested and an injunction may be sought restraining the Customs Service from collecting the new duties until the question is settled.

The point at issue is said to be the inclusion of transportation rates in the comparative estimates of Canadian and Domestic production costs in which case the new rate would be contrary to the theory of the Tariff Act. The report of the Tariff Commission on grain and grain products will be submitted to the President shortly and may afford other openings for contesting the new rates.

NEW OPPORTUNITIES

OPPORTUNITY for service and for profit to the grain dealer does not disappear when diversified farming comes into a territory and reduces the grain acreage. On the contrary, according to President John Lee Coulter of North Dakota, the opportunities may actually be increased along three important lines: Cleaning grain before shipment; grinding feed; handling seed.

It has been thoroughly demonstrated that it would pay farmers to have their grain cleaned at the elevator, paying a reasonable charge for the service. This would give them a materially higher grade and would return a considerable amount of good feed, on which, otherwise, the elevator would have to figure paying freight.

As diversification increases, so also does the demand for ground feed, which is much higher in feeding value than whole grain. A large and profitable business in grinding can be worked up, and particularly in screenings, which under no conditions should be fed unground, as this only propagates more weeds and trash in the fields.

In regard to handling seeds, the elevator operator is in a strong strategic position. He probably knows the approximate yield which most of his patrons had, and can be of real service in advising improved strains and tested seed to increase the yield and the profit to the farmer.

Decrease of grain volume offered at the elevator gives the operator much more time, even in the so-called busy season, than he has ever had before, and this time is vouchsafed, not to be spent in bewailing the change in his fortune, but rather to give opportunity

April 15, 1924

to enlarge his field and to hustle for new business which will return better profits than the old grain business ever did.

SEED CORN

ON ANOTHER page may be found a symposium by seed dealers on the corn situation. Good seed corn is harder to find than it has been for years. There is plenty that looks all right, but it does not come up to the average under the germination test. Poor seed means a light crop next year, so it is imperative that dealers warn their farmer friends to test their own corn, if they have it, and if they have not or if it shows poorly under the test, to take immediate steps to procure good seed.

In the districts where seed is particularly scarce or of poor quality it is an opportunity for dealers to show their organizing ability, to round up the better lots of seed and to tell the farmers where it may be found. Dealers could well afford to do this even though they derived no profit from the seed transactions, for it will mean a more prosperous community and more grain to handle next year. Fortunate is the dealer who has a stock of good seed on hand, but make sure that your own will grow.

WHEAT CONDITION ABOVE NORMAL

CONDITION of Winter wheat on April 1, as determined by the Department of Agriculture, was 83, as against 75.2 last year and 82.5 for the 10-year average. Taking average abandonment into consideration, this forecasts a production of 549,415,000 bushels, compared with 572,340,000 bushels produced last year. Spring has been so backward in many sections, however, that it is impossible to estimate the amount of abandonment, and as there has been plenty of moisture, except in California and the Southeast, the production may be greatly in excess of this estimate.

The condition of rye was 83.5 as against 81.8 last year and 87.9 for the 10-year average. This puts the probable production figure at 59,135,000 bushels, practically the same as last year; over 40,000,000 bushels under 1922, and 7,000,000 under the 10-year average. The same conditions exist for rye as for wheat, and with a favorable spring, production might easily go over the average.

All of the 66 vessels holding grain in winter storage at Buffalo have been discharged. At the Canadian Head of the Lakes there are 60,000,000 bushels in the elevators and over 3,000,000 in vessels. As soon as navigation opens eastern elevators will need all the capacity at their disposal for there will be an unprecedented movement.

Annual requirements of flax seed are about 30,000,000 bushels and the production last year was 17,500,000 bushels. The average price in 1923 was \$2.12 per bushel which made the return per acre considerably more than that from wheat. It seems that northwestern farmers overlooked an opportunity which will not be as good next year.

The wheat poolers seem to be having a hard time getting farmers to sign on the dotted line. The record made by the wheat pools is a difficult one to argue away.

Up to March 1, the cost to the Canadian Government of the Royal Grain Inquiry Commission has been \$105,586. We wonder if the findings of the Commission have been worth that much.

Elevators which carry fertilizer, oil meal, or any other sideline which has a distinctive and penetrating odor, should exercise great care that flour is not stored near them, as flour readily absorbs odors which make it unfit to eat.

George C. Jewett of the American Wheat Growers Association has asked President Coolidge to make his attitude clear on the McNary-Haugen bill. As the bill is up in the air it is hardly likely that Silent Cal will commit himself.

The Department of Agriculture has estimated the value of American farms for 1923 at \$47,000,000,000 as compared with \$66,000,000,000 at peak prices of 1920. But even at the present figure American farmers cannot be considered in the pauper class.

General Dawes' report for the Reparations Conference gives a basis for hope that European affairs may soon be on the way to settlement. In the shadow of the background, however, are massed standing armies in every country and armament which takes the larger part of every country's income. Will the new light of common sense dispel this shadow?

One of the best examples of co-operation we know of is found in the Lake Shippers Association of Fort William—Port Arthur. The Association takes charge of all forwarding operations under a sort of clearing house plan so that every elevator is kept in a position to handle arriving grain and no boat need wait for a cargo until a berth is cleared. It is a plan which could be put into good use in most American ports.

Alabama is getting an expression from the shippers of the state as to the advisability of building grain elevators at Mobile, along with other improvements at the port. We would say that Mobile needs an export elevator about as much as does Denver. Galveston and New Orleans have facilities to handle all normal Gulf grain shipments, and a Mobile house would be of real value only in time of extraordinary emergency. At all other times it would be a pretty white elephant, to be admired but not used.

The Washington Wheat Growers Association, the pioneer wheat pooling organization in the country, has had enough of it and are taking steps to dissolve the organization.

Last year they handled only 10 per cent of the Washington crop and most of it on the two-thirds basis, the grower having the say as to when two-thirds of his contribution to the pool should be sold. The organization is now working for the passage of the McNary-Haugen bill as the voluntary pool has proved a failure. Those farmers surely can stand a lot of punishment.

One of the major topics to be discussed at the meeting of the Chamber of Commerce of the United States at Cleveland in May, will be "Business and Agriculture." An attempt will be made to discover why certain sections of the farmers are in distress. Not until the real cause of the malady is discovered can an intelligent suggestion for a cure be made. It is quite likely that neither Senator Brookhart nor Senator Magnus Johnson will be called into consultation.

The efforts to form wheat pools, based upon the argument that pools of other commodities formed by Aaron Sapiro have been successful, has had one good effect. People have begun to inquire just how these other pools are getting along and in most cases they find that said pools are not getting along at all. In the few cases where a measure of success has been attained, it is because the poolers have, through co-operation, learned the value of careful selection and grading and better packing methods, and not because of any virtue in the pooling idea. Mr. Sapiro's star is on the way toward total eclipse.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

of AMERICAN ELEVATOR AND GRAIN TRADE, published monthly at Chicago, Ill., for April 15, 1924.
State of Illinois }
County of Cook } ss.

Before me, a notary public in and for the state and county aforesaid, personally appeared A. J. Mitchell, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the AMERICAN ELEVATOR AND GRAIN TRADE and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:
Publisher, Mitchell Brothers Publishing Co., 431 S. Dearborn St., Chicago, Ill.

Editor, Richard Pride, 2878 No. Clark St., Chicago, Ill.
Managing Editor, H. H. Mitchell, La Grange, Ill.
Business Manager, A. J. Mitchell, 4820 Kimbark Ave., Chicago, Ill.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)
A. J. Mitchell, 4820 Kimbark Ave., Chicago, Ill.; A. H. Mitchell, 4462 Woodlawn Ave., Chicago, Ill.; John E. Bacon, 4546 Clarendon Ave., Chicago, Ill.; M. B. Mitchell, Ottawa, Ill.; M. W. Mitchell, Washington, D. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)
None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only.)

A. J. MITCHELL,
Business Manager.

Sworn to and subscribed before me this 26th day of March, 1924.

[Seal]

W. F. WARRICK,
(My notarial commission expires May 8, 1924.)

D. H. HOPKINS
Cincinnati

NEWS OF THE TERMINAL MARKETS

W. H. TOBERMAN
St. Louis

CANADIAN LABORATORY IS CLOSED

After an existence of 11 years the Canadian Government Grain Research Laboratory at Winnipeg, Manitoba, was closed the last of March. It had been carried on under the supervisor of the Board of Grain Commissions. Dr. Fred Birchall was in charge.

SEES A PROMISING FUTURE

There is a steady and rather firm market for all grains here at Indianapolis. While the quotations are fractionally lower than a few days ago, the call is sufficient to take care of such receipts as are coming along at this time. We still remain rather above parity with other markets.

There is considerable wheat and corn to come along as the opportunity presents itself for delivery and we can hardly look for any material decline from values now existing. The wheat is

busy with spring work for another 30 days.—J. C. Shaffer Grain Company, Chicago, Ill. From Market letter of April 9.

NEW OFFICERS AT MILWAUKEE

A. R. Templeton was chosen president of the Milwaukee Chamber of Commerce in the election held on April 7.

The life of Mr. Templeton in the grain trade covers a wide span of years, marked by steady progress. He entered the grain business in Templeton, Wis., in 1887. His father was in the grain business in Templeton and here is where A. R., the son, learned the rudiments.

It was not long before he began to seek broader fields and by 1899 he had landed in Milwaukee where he began to work for the Armour Grain Company. In 1910 he became a partner in the firm of Johnstone & Templeton Company. This partnership lasted 11 years until 1921, when he again became associated with the Armour grain interests in Milwaukee.

Mr. Templeton has always taken a keen interest in all phases of the Chamber of Commerce work. Since 1910 he has served on a number of the important committees and also as a director. For the past three years, he has been a vice-president of the Chamber.

Hugo Stolley was named as the first vice-president; W. A. Hottensen was chosen second vice-president and H. A. Plumb as the secretary-treasurer. Directors are L. J. Beck, A. L. Flanagan and O. R. Sickert. The Board of Arbitration members are Charles F. Coughlin, James P. Hessburg and Carl A. Houlton. The members of the Board of Appeals are S. G. Courteen and H. H. Peterson.

Mr. Plumb now enters the office of secretary-treasurer for his sixteenth year and he has been connected with the Chamber for 31 years. He was a clerk for Armour & Co., packers, in Chicago when he left there 31 years ago to become a clerk in the Milwaukee Chamber. He was assistant to the secretary for two years, a position especially created for him and then he became secretary.

Mr. Plumb has seen the grain trade of the Milwaukee Chamber grow from receipts of 35,000,000 bushels to a high record of 87,000,000 bushels in 1916. The normal trade of the Chamber now rules from 60,000,000 to 70,000,000 bushels annually.

TOO MANY COOKS

The knowledge forced upon us all is—that there are too many who wear a badge of authority from the Federal and state governments; many are worthy and efficient—more are wholly unworthy, incompetent, and altogether superfluous and a burden on the body politic. Sad to relate, a vast number are connected and affiliated with the Department of Agriculture, where their influence in politics is so demoralizing to the happy progress of the farmer and the grain trade, that it seems one help for the country will come through the most drastic reduction of the appropriations for the Department of Agriculture. And then, a Secretary of Agriculture, i. e., a conservative man with a vision to understand that the "Business of Farming" can best be conserved and made profitable by directing the activities of his department toward educating producers in the natural advantages of peculiar soil conditions in their section of the vast agricultural areas—the selection of desirable classes of grain for seed, free from foul mixtures—and so far as is possible, a kind and variety that will meet the preferences of the trade, so as naturally to

command attractive prices. The prosperity of the country as a whole, will in a like measure be reflected in the progress for, and profit to, the farmer.—Pope & Eckhardt Company, Chicago, Ill. From Market letter of April 5.

ABANDONED ACREAGE LESS THIS YEAR

The Government forecast the Winter wheat crop, from the April 1 condition, 549,000,000 bushels. This forecast is accompanied with qualification which should not be disregarded: namely, it is made "upon the assumption of average abandonment of acreage, and average influence on the crop to harvest."

It is already well recognized, that the abandonment will be less than average, which is 10 per cent. Upon the assumption of 6 per cent abandonment, a conservative estimate, and average influences on the crop to harvest, the Government condition figure would forecast 573,000,000 bushels. Last year's crop was 572,000,000 bushels. In the Soft Winter wheat states of Ohio, Indiana, Illinois

A. R. TEMPLETON
President Milwaukee Chamber of Commerce

coming along very fine; the only bad reports are from the hill lands of southern Indiana. The season is just now opening for spring work and it is surprising how quickly the people have gotten into the fields. A larger acreage of oats has been seeded than usual and conditions seem very favorable, as the ground has ample moisture and we cannot see anything but a promising future for our trade.—H. E. Kinney Grain Company, Indianapolis, Ind. Market letter of April 12.

ARGENTINE CORN NEARLY READY FOR EXPORT

Argentine corn is nearly ready for the export market and it is unlikely that our markets will receive any help in the way of export demand for some months to come. In time this situation should affect the deferred deliveries, particularly the September. Southwest messages told of an expected increase in country offers but this is problematical as farmers are not bearish as a rule and will be

H. A. PLUMB
Secretary Milwaukee Chamber of Commerce

and Missouri, the Government figures forecast roughly 115,000,000 bushels compared with 176,000,000 last year; in the Hard wheat states of Nebraska, Kansas, Oklahoma and Texas 230,000,000 compared with 164,000,000 last year.

The first half of April has been favorable for the crop.—Nat C. Murray, Clement, Curtis & Co. Market letter of April 11.

GEORGE J. SIEMERS

Members of the seed trade throughout the country, but especially in the East, suffered a severe loss through the death of George J. Siemers on March 24 at the untimely age of 44 years. For the past 14 years Mr. Siemers, one of the best-liked and most respected men in the trade, had been widely known as the active and efficient manager of the New York office of the Albert Dickinson Company. About 20 years ago he was engaged in a clerical capacity with the old spice importing firm of John Kissonock & Co., of New York City, later serving for a few years with D. A. Shaw & Co. Subsequently he went into the seed brokerage business on his own account, being one of the accredited eastern representatives of the Albert Dickinson Company. Owing to a com-

plication of diseases, primarily Bright's disease, which finally affected his heart, he had been unable to attend to business regularly for over a year and for the past three months he had been confined to his bed at his home in East New York. He is survived by his wife and son.

EXCHANGE WILL PUBLISH OWN PAPER

It is announced that the Merchants Exchange of St. Louis, Mo., is arranging to publish a small house organ in which it will give personal news about the members of the exchange and economic information regarding grain crops and the grain marketing system of the country.

A LARGE CARGO OF GRAIN

What was said to be the largest cargo of grain ever moved on the Mississippi River at one time, arrived recently at New Orleans, La., from Cairo and Memphis. It included 10 steel barges containing more than 15,000 tons of grain and merchandise, an amount sufficient to load over 300 average freight cars.

SHIPPERS' ASSOCIATION ELECTS OFFICERS

At the recent annual meeting and dinner of the Minneapolis Grain Shippers Association of Minneapolis, Minn., the following officers were elected: E. P. Kehoe, re-elected president; H. A. Murphy, vice-president; James A. Gould, secretary. The Board of Directors chosen were E. P. Kehoe, H. A. Murphy, A. L. Goetzmann, W. J. Russell.

CHANGES IN MEMBERSHIP

Chicago.—The memberships of the following have been transferred: Daniel McKinnon, Charles H. Diffenderffer, Estate John Hill, Jr., Charles H. Klein, Eugene J. Burke, Thomas O. Brown, Estate Isaac N. Neeld, Estate Leon Euziere, J. Alva Harrison, C. W. K. Hvale, Alfred Ettlinger, E. D. W. Pogue, Estate Charles H. Hulburd. The following were elected to membership on the Board of Trade: Harry E. Hill, William B. King, Thomas A. Liston, Newcomb Wildman, Maurice Stern, William L. Meffert, Carter O. Euziere, Leonard T. Harris, William J. Fitzsimons, Albert M. Adams and Francis A. Bean, Jr., Henry S. Frazer has been suspended. Reported by Secretary J. J. Fones.

Wichita.—Fred C. Hoose and S. A. Marshall are new members on the Board of Trade. Reported by Secretary R. B. Waltermire.

CORN FOLLOWS LEAD OF OTHER GRAINS

Receipts of corn here have been fair for several days past and values in this market have been declining in sympathy with the break in other markets and also on account of limited demand. The biggest portion of arrivals here recently has been from other terminal markets, where our largest corn using industry bought considerable corn to come here. This naturally has had a weakening effect on our market. While the country has not been selling freely, there has been quite a little corn consigned to this market. The demand for shipment continues very dull. However, parties here would not care to risk shipping corn any great distance at this time fearing its condition on arrival at destination. Quite a little corn has been arriving here in a heating condition recently.

Receipts of oats have been light and prices here have been holding well in line with other markets. Shipping demand for this cereal has also been light. On the other hand, offerings from the country are very small.—*Mueller Grain Company, Peoria, Ill. Market letter of April 10.*

TRADE SITUATION QUIET

The spot situation in this market continues very quiet with the trade almost at a standstill. Stocks of corn and oats in store are very moderate but with the present limited demand they are likely to be more than adequate to carry the trade until the opening of lake navigation which will occur latter part of April. The feeding situation in the East has been very unsettled during the past winter, largely due to a milk war between the dairy-men's league and the large milk interests. Farm-

ers generally complain that their milk checks will not pay their monthly feed bills and as a consequence they are feeding just as lightly as possible with the result that dealers have more than usual supplies on hand for this season and with grass coming in the near future they propose to dispose of present stocks before making further purchases.

There are some indications of a slight improvement in the domestic demand for oats but as Canadian oats are only slightly under a working basis in competition with American oats, the trade is inclined to go very slow in making purchases until they see what effect the opening of navigation has on Canadian offerings.

Spot offerings of Spring wheat have been well cleaned up but the demand for Soft Winter is extremely slow with ample supplies on hand to take care of the trade for some time to come unless there is a very decided improvement in the demand.—*J. G. McKillen, Inc., Buffalo, N. Y. Market letter of April 10.*

GEORGE A. BREIER

The experience in the grain trade of George A. Breier who, in the early part of the year, was elected president of the Peoria Board of Trade of Peoria, Ill., covers a period of 47 years. Mr. Breier follows a long line of grain men who have headed the affairs of this important grain center, and brings to the office a knowledge of grain and allied businesses that naturally falls as an inheritance of all these predecessors.

Mr. Breier started as office and errand boy September 1, 1877, with Hancock & Co., at that time



GEORGE A. BREIER

doing an extensive grain receiving, shipping and exporting business. He soon advanced to the position of clerk in the accounting department and later became assistant to the salesman and buyer on the exchange floor.

From his success in the office he broadened his experience, commencing with the year 1885, by becoming traveling solicitor for the house, his territory embracing Illinois, Iowa, Missouri and Nebraska. He remained on the road until 1890, when he went with the firm of J. M. Quinn & Co. as chief clerk and manager and remained with them until 1907 when he started into business for himself under the firm name of George Breier & Co. He retired from active business in 1913.

In 1917 Mr. Breier re-entered the grain business with J. A. McCreery & Sons, with whom he is now associated. He has been a member of the Peoria Board of Trade since 1900.

NO PROSPECT FOR HIGHER LEVELS

From a general standpoint wheat has lost quite a few of its former friends. The fact that Argentine offerings and shipments exceed a year ago at prices under what Canada is getting for their wheat presents a gloomy outlook for the marketing of our surplus. Some time ago it was thought the severe winter we passed through would bring about some new buying due to winter killing and damage to wheat. However, the outlook in the Southwest, as well as the southern Winter wheat section east of the Mississippi River, is all that could be expected and the incentive for higher levels are woefully lacking. The Government in its endeavor to help the farmer has so under-

mined and handicapped the speculator that he is not disposed to step into the market at present levels and assume the hedges of our supply.

The situation in corn and oats is different and at times reflects the cash demand based on light movement from the country. We hesitate to predict any future trend of these cereals as speculation is at such a low ebb.—*The C. A. King & Co., Toledo, Ohio. Market letter of April 11.*

EMBARGOES HINDER BUSINESS

Shipment out of the port, either for export or intercoastal service has been temporarily discontinued by Government embargo. This has, of course, stopped the shipping that was going on to the Atlantic cities and Gulf ports, mainly of Alfalfa hay. It may be some time before this is resumed, but in all probability by the time the new crop is available all restrictions will have been removed and the business can be continued on a normal. Hawaiian and Pacific export business is in the same condition, and we are now caring for it out of the Puget Sound port.—*The A. W. Scott Company, San Francisco, Calif. From early April Market Report.*

CHICAGO'S PLACE AS A CONTRACT MARKET

Of the 1,035,000,000 bushels of grain traded in on the contract markets supervised by the United States Department of Agriculture in March, all but 104,498,000 bushels were traded in at Chicago, according to a report of April 9 by local Supervisor J. W. T. Duvel. The business in wheat at Chicago aggregated 529,882,000 bushels, out of a total in six markets of 593,250,000 bushels. The corn business was only slightly less, or 421,249,000 bushels. Chicago fell behind other markets in volume of business in rye, barley and flax. Transactions (sales) in grain futures on the contract markets listed, for the month of March, 1924, as reported to the Grain Futures Administration. (Bushels—last three ciphers omitted).

	Wheat	Corn	Oats	Rye	Barl'y	Flax	Total
Chicago	505,598	406,849	66,631	17,167	0	0	996,245
Chicago Open							
Board	24,284	14,400	1,065	24	0	0	39,773
Minneapolis ..	31,855	0	5,425	7,248	461	572	45,561
Kansas City...	17,525	13,285	28	0	0	0	30,838
Duluth	8,493	0	0	3,735	0	1,269	13,497
St. Louis.....	4,483	5,588	0	0	0	0	10,071
Milwaukee	1,012	1,638	671	210	0	0	3,531
Total	593,250	441,760	73,820	28,384	461	1,841	1,139,516

*Durum wheat; Duluth being the only market trading in Durum wheat.

RAILROADS MOVING FREELY

Receipts of corn have been very much lighter here the past week and the demand has also continued light. Very little corn offering from country elevators and stocks here are very light. Our market would take four and five yellow corn to advantage at this time. Cash prices are about as high on such grades as we have had on the crop.

The demand for oats is small and for better grades of No. 2 White. Three White and four White especially are neglected. Stocks of oats here are rather heavy for this season with a very light demand and no prospects for them being reduced very much. Offerings continue fair. A good percentage of four white oats is arriving. Some little demand for heat damaged oats at heavy discounts.

Local wheat movement is practically nothing. There is some demand for musty wheat of low grades sample wheat.

The railroads are moving shipments from the west to our market in about the best time that we have experienced the past year. No delays are reported and there is no corn arriving out of condition.—*Harper Grain Company, Pittsburgh, Pa. Market letter of April 10.*

INDIANA CROP EQUALS LAST YEAR'S

"The acreage of wheat, corn and oats in Indiana will be about the same as last year," reports E. K. Shepperd, manager of the Indianapolis office of The Cleveland Grain & Milling Company of Cleveland, Ohio. "Wheat in the northern part of the state is pretty spotty and there will be many damaged fields. The farther south you go the bet-

ter the wheat looks. Farm work is decidedly late and while oat seeding is progressing nicely is not in any way nearly finished. The soil is too wet in most localities to make much headway."

TERMINAL NOTES

Arthur E. Adkins has retired from the Frank A. Pierce Grain Company of Minneapolis, Minn., and will take a needed rest.

Cecil B. Seay of the Consolidated Feed & Grain Company of Buffalo, N. Y., returned early in April with his wife from a trip to Italy.

Raymond P. Life, grain and hay man of Toledo, Ohio, who is now traveling abroad, is spending the middle part of April in Cairo, Egypt.

It is announced that creditors of E. W. Wagner & Co. of Chicago will receive a dividend of 10 per cent, making 65 per cent paid up to date.

C. S. Watts, recently connected with the Minneapolis offices of Lamson Bros. & Co., of Chicago, Ill., now represents J. S. Bache & Co., in the Flour City.

Fred C. Hoose, vice-president of the Norris Grain Company of Chicago and Kansas City, has been admitted to membership in the Wichita Board of Trade.

Henry Ostrander is temporarily taking care of the Toledo office of Jackson Bros. & Co. of Chicago in place of representative John Steuer, who died recently.

C. A. Dayton, recent broker for J. S. Bache & Co., at Kansas City, Mo., has made plans to go to Vancouver, B. C., where he will engage in the lumber business.

Frank Gulick, representing Hitch & Carder of Chicago, Ill., left early in April on an extended trip among the firm's customers in Illinois, Iowa and Minnesota.

Thomas A. Lisbon, with E. W. Bailey & Co., well known grain commission house of Chicago, Ill., has been admitted to membership in the Chicago Board of Trade.

The Philadelphia Grain Elevator Company of Philadelphia, Pa., started their new grain elevator known as the Bergdoll Elevator at Twenty-ninth and Parish Streets on April 1.

Ferdinand A. Meyer, president of the Baltimore Grain Company of Baltimore, Md., will sail with his wife, daughter and son-in-law the last of April on a pleasure trip to Europe.

S. A. Marshall of the Marshall Grain Company of Oklahoma City, Okla., has become a member of the Wichita Board of Trade, Wichita, Kan., and moved his main office to Wichita.

The J. C. Shaffer Grain Company of Chicago, Ill., established a branch office at Davenport, Iowa, on April 1. It is under the management of Wichelman & Co., in the Kohl Building.

George M. Grace, formerly with the Texas Transport & Terminal Company, is now associated with the W. L. Richeson Company, Inc., freight brokers and forwarders, New Orleans, La.

The Commerce Department, Washington, D. C., reports that the city of Milan, Italy, is making plans for the erection of a permanent exchange where dealing in cereals will be conducted.

C. V. Fisher, formerly connected with the Western Grain Company of Kansas City, Mo., recently returned from a visit to Los Angeles, Calif. He has not announced any plans for the future.

Frank J. Gillespie, who has been for some time connected with E. E. Anderson & Co., at Memphis, Tenn., has formed the Gillespie Grain Company to conduct a general grain, hay and feed business.

The Kansas Central Elevator at Leavenworth, Kan., with capacity of 450,000 bushels, has been purchased by the Kansas Wheat Growers Association from B. C. Moore, receiver for the Moore-Lawless Grain Company of Kansas City, Mo. It will be used for grain pooled by the Association.

The Updike Grain Corporation of Omaha, Neb., has closed its office at Milwaukee, Wis., and turned its business at that point over to the Froedtert Grain & Malting Company. Leonard J. Keefe, who

for several years past has been manager of the Milwaukee Updike branch, has become connected with the Froedtert Company as assistant to J. P. Hessburg in the grain consignment department. Clifford Thorsen will represent the company in Iowa and South Dakota.

H. E. Kinney, head of H. E. Kinney Grain Company, Indianapolis, Ind., left April 14 on a four weeks trip to California. He will visit San Francisco, Los Angeles and other points.

The Fort Worth Grain & Cotton Exchange of Fort Worth, Texas, established a cash grain market on April 1, from which daily reports will be issued showing prices of grain and sales made over the state.

Don A. Kern of the Sheffield Elevator Company of Minneapolis, Minn., left that city late in March on an extended trip, during which he will visit the patrons of the firm in eastern and southern territory.

H. Edward Richter, head of the Richter Grain Company of Cincinnati, Ohio, was recently elected president of the College Hill Business Men's Club, a community center in which he maintains his residence.

Robert T. Smith, formerly of the Smith Grain Brokerage Company of Kansas City, Mo., has leased and will operate the 50,000-bushel grain elevator at Norfolk, Neb., owned by the Farmers Co-operative Association.

The Board of Directors of the Milwaukee Chamber of Commerce, Milwaukee, Wis., at a recent meeting decided to continue its traffic department for another year. John L. Bowlus was reappointed traffic manager.

The offices of F. H. Peavey & Co., in the Minneapolis Chamber of Commerce Building, Minneapolis, Minn., were broken into by burglars recently, who wrecked the safe, securing \$670 in money and valuable jewelry.

The Kansas City plant of the Corn Products Refining Company of Chicago and New York has made a further reduction in operations, now grinding 85,000 bushels a week, a decrease of 55,000 bushels from the high of a month ago.

Kneisler Bros., of Milwaukee, Wis., have leased the 800,000-bushel grain elevator known as the Bay Elevator at Milwaukee, which formed a part of the Ladish Milling Company property. A. W. Bosch is superintendent of the elevator.

Raymond Sheldon, secretary of the Oklahoma City Grain Exchange of Oklahoma City, Okla., has become connected with the grain department of the Great Western Mill & Elevator Company of Amarillo, Texas. He will maintain his headquarters in Oklahoma City.

The wide circle of friends in central territory of Eugene Smith, secretary of the St. Louis Merchants Exchange, will learn with deep regret that he is confined to his home with a threatened attack of pneumonia. W. J. Krings is filling the office of secretary during his absence.

Secretary Herring of the New Orleans Board of Trade, New Orleans, La., has just issued the forty-first annual report of the trade and commerce of that market. It is replete with statistical information and lists all the important officials connected with the New Orleans Board of Trade.

L. W. Forbell, of L. W. Forbell & Co., of New York, N. Y., whose visits to western state grain dealers associations are always an event in grain circles, now leads in the booster campaign for new members of the Grain Dealers National Association. Mr. Forbell has a record of 10 new members.

The four members of the firm of E. W. Wagner & Co., of Chicago and New York, which failed December 31, 1921, were indicted by the New York County Grand Jury in April, charged with "feloniously trading against the order of a customer." The defendants are Emil W. Wagner, head of the firm; Frank W. Donaldson, manager of the Chicago office; Charles A. Johnson, resident New York manager; Ernest Tietjens. Some time after the failure creditors received from the receivers of the com-

pany cash to the amount of half their claims and note to balance payable in 1927 without interest. Subsequently a dividend of 20 per cent was paid to be applied on the note.

Harper & Sons of Des Moines, Iowa, who have been conducting a general grain business for several years at that place, discontinued business on March 31.

Jack De Courcy, who has represented Gerstenberg & Co., of Chicago in central territory for a number of past years, has resigned to go into another line of business.

E. J. Grimes of the Cargill Commission Company of Minneapolis, Minn., spent some time in Milwaukee, Wis., recently making arrangements for shipping grain down the lakes.

The Board of Directors of the Corn Products Refining Company at a recent special meeting in New York City voted to increase the authorized common stock of the company to \$75,000,000, to reduce the authorized preferred stock to \$25,000,000 and to change the par value of the common from \$100 to \$25. The directors also declared a dividend of 25 per cent upon the present outstanding common stock, payable in new common stock of \$25 par value to stockholders of record April 5.

B. C. Moore, receiver for the Moore-Lawless Grain Company of Kansas City, Mo., has made payments to creditors of approximately \$252,000. The liabilities at the time of the failure were estimated at \$600,000. Bank claims have been paid in full and claims of grain firms adjusted on a basis of 70 to 95 per cent. It is expected that other unsecured creditors will receive 35 to 45 per cent. Property not yet distributed includes two farms, memberships in the Kansas City Board of Trade and the Denver Grain Exchange and notes and mortgages not yet due.

TRADE GOSSIP

The Hess Warming & Ventilating Company of Chicago, Ill., made a shipment recently of four corn driers to the Argentine Republic. They will be used for drying corn in country grain elevators.

D. B. Fegles, head of the Fegles Construction Company of Minneapolis, Minn., and Fort William, Ont., was recently elected president of the Associated General Contractors at their annual convention held in Minneapolis.

P. F. McAllister, recently of Bloomington, Ill., and well known in grain elevator building circles of central territory has joined the Burrell Engineering & Construction Company of Chicago and is now secretary of that company.

When the new export elevator of the Baltimore & Ohio Railroad Company at Locust Point, Baltimore, Md., is completed early in July the port of Baltimore will have grain storage facilities for about 12,000,000 bushels of grain.

The Richardson Grain Separator Company of Minneapolis, Minn., is building a new type Richardson Separator known as the "Simplex Junior." It is slightly smaller than their standard machine and designed to make a finished separation of wheat originally containing up to 10 and 12 per cent of screenings, bringing the dockage down to 1 per cent.

James Macdonald, head of the grain elevator and flour mill building firm of Macdonald Engineering Company of Chicago, Ill., and connected with the San Francisco office at 149 California Street, was a visitor at the Chicago office recently. He reports that the Western Milling Company's mill at Oakland has been converted into a large vegetable oil manufacturing plant. The mill has a crushing capacity of 100 tons per day and is equipped for handling all kinds of oil producing seeds and nuts, including flax seed, copra, sesame, peanuts, etc.

L. B. May is now receiver for the Farmers Elevator & Exchange Company of Mt. Cory, Ohio.

A CARGO of Canadian wheat has recently been forwarded to Mexico in an endeavor to establish a market, and predictions are made of supplementing the native product in fair quantity.

WHEAT PRODUCTION IN SOUTH AFRICA

The wheat season in South Africa varies greatly according to the rain fall. The crop is generally sown during April and May and harvested in October to December; the bulk of their wheat supply comes from the western province of the Cape. According to G. K. Donald, American consul, census figures relating to wheat production last season are not available at present, but estimates fix the yield at 1,808,000 bags. The 1922 season's yield exceeded this figure by 92,000.

Details of imports and exports of wheat and wheaten flour during the last calendar year are not completed, the following figures covering the 11 months ended November last: Wheat, 260,671,990 pounds; wheaten flour, 91,804,490 pounds; wheaten flour ground in bond from imported wheat, 286,456 pounds. Exports: Wheat, 5,945 pounds; wheaten flour, 491,221 pounds.

GRAIN MARKET IN CZECHOSLOVAKIA

Czechoslovakia's exports of grain and flour in 1923 totaled 327,792 tons. The principal item among the grain was barley, of which 192,495 tons left the country. They also shipped out 40,487 tons of oats, 50 per cent of which went to Austria. Exports of wheat flour were 21,938 tons. The bakers of Czechoslovakia have stated that they prefer American flour and grain above all others, and the Association of Bakers have stated that with American flour and flour made of American grain it is unnecessary to maintain night forces in their bakeries, thereby reducing the cost of bread.

It is also reported by Consul C. S. Winans that imports in 1923 included 235,191 tons of wheat, of which 34,183 tons came from the United States. In commenting on these figures the Department states that they do not accurately represent imports from the United States as shipments of wheat to Czechoslovakia are often made through Germany and other adjacent countries having seaports.

STUDY POLITICS

BY TRAVELER

There was a time—and it's not far removed either—when the grain trade kept its weather eye and it's best ear turned toward Chicago. It was there that the wonderful and intricate mechanism of the grain business had its originating force, and from whence the tremendous annual volume of grain was handled with such dispatch and lack of friction as to make the whole world marvel. There, the brightest minds in the business, after years of experience and experiment, had worked out a system so perfect that, it was automatically able to meet and cope with any condition that might arise. Yearly the great prairies deluged their seas of grain upon the market, and yearly the great system carried the surplus away, leaving an open channel for the new crops to follow.

But that was before Little Willie awoke one night from his "sweet dream of peace" and turned his war dogs loose upon an unsuspecting world, thus forcing us to "make the world safe for Democracy." That word "safe," by the way, must have been a printer's error. It really should have read "save"; for we all had to dig down deep into our pockets, and, having thus acquired the habit, that's what we've been doing pretty constantly ever since.

However, as Mark Twain would say: "Never mind—that doesn't matter." What does matter is this: The war furnished an excuse for the Government to poke its nose into every self-regulated and self-respecting business, so that now, in the course of senatorial events, it becomes necessary for free and independent business men to consecrate four-fifths of their lives to the study of countless laws, in a supreme effort to do business without breaking some of them.

But even though the merchant may take the most elaborate precautions; though he may outline the most careful business policy and invest large sums in a venture which—under normal conditions—should reasonably yield a fair profit, before the

deal can be fully consummated a lightning bolt from the direction of Washington knocks the props from under his structure, and he finds himself facing a huge loss.

In the case of the grain merchant it is not enough, today, to keep posted on all statistical information; to read all the gossip and crop reports; but it is equally and even more important to study the movements of the fanatics at Washington, and if possible try to outguess them. It is at Washington, today, that the markets are made, and it is Washington that most often breaks them.

So, if you have the wisdom of a Socrates; the farsightedness of a Mark Hanna, you will listen to the Wise Men of the East, forget all you've ever learned about the grain business and invest your money absolutely against your judgment, and ten to one you'll win.

MORE GRAIN FROM DIVERSIFIED FARMS

"Common crops like wheat, corn, kafir and cotton are soil robbers, they continually remove the nitrogen, phosphoric acid and potash from the soil and each succeeding crop leaves the soil just that much poorer. On the other hand, the legumes like Alfalfa, Clover, Sweet Clover, Cowpeas and Soybeans are soil builders, they gather enormous quantities of nitrogen from the air and store it in the soil," says H. M. Bainer, Director of The Southwestern Wheat Improvement Association.

"Farmers who rotate their wheat with legumes are not complaining about low yields or poor quality, they are getting an increase of 8 to 12 bushels per acre of high protein content wheat. They do not have to buy commercial fertilizers to keep up their soil fertility, neither do they have to sow the whole farm to wheat in order to produce a few hundred bushels.

"Experimental data shows that the percentage of protein in wheat is increased of decreased in proportion to the supply of nitrogen in the soil. This accounts for the fact that the wheat grown on a field that is rich in nitrogen has a high protein content and sells for the top price. Fields that are deficient in nitrogen are quite likely to produce a high percentage of yellowberry wheat, which is always associated with low protein content and poor bread making properties.

"In order to maintain the organic matter or humus content of the soil, legumes should be plowed under, green, if possible. It frequently happens that the organic matter is about as nearly depleted as the nitrogen and both are essential in the production of good paying crops. A soil that is well supplied with organic matter will retain more moisture than one where the supply is low. Sufficient organic matter improves the physical condition of the soil and tends to reduce baking, checking, cracking and blowing, at the same time, it makes all tillage operations easier."

WHAT WHEAT COSTS TO RAISE

One of the documents used in the campaign to promote some form of Government aid to the wheat farmer emanates from an authoritative source in North Dakota. It gives the cost statistics of 122 farms in North Dakota, located in 10 counties. According to these figures it cost \$1.49 per bushel to raise wheat in North Dakota in 1923, for the average acreage cost was \$12.63 per acre.

Now this may be conclusive testimony that the exclusive wheat farmer is in a bad way, but it is a poor argument for fixing wheat prices. For, going back to 1910, in the 13 years up to and including 1922, the yield of Spring wheat varied from 18.3 bushels per acre in 1915 to only 6.8 bushels in 1919. The average for the 13 years was about 11.5 bushels. On the basis of the figures given for 1923, the cost per bushel in 1915 would have been only about 70 cents per bushel, while in 1919 it would have been \$1.85. The average for the 13 years would have been just about \$1 per bushel. This was for the whole Spring wheat crop. But in every year the cost of production would vary greatly from the figures quoted, which are only averages. Where 30

bushels per acre was raised the cost price would be only about 40 cents per bushel, and when six bushels was raised the cost price would be over \$2 per bushel. If Government is expected to protect the low yield farmer from loss, a guarantee of \$2 per bushel, which would save the low yield from loss, would give \$60 per acre to the fortunate wheat farmer who had a 30-bushel yield. This seems a rather large spread between extremes to ask the consumer to pay for.

If \$12.63 per acre is the minimum cost of wheat raising in the United States, we can hardly expect to export wheat to Europe, where wheat yields average in different countries from 18 to 35 bushels per acre, unless we greatly increase our own yield which averages less than 15 bushels per acre. Accordingly the first lesson the North Dakota figures teach is to decrease wheat acreage and increase wheat yields.

SEED GRAIN NEEDS IN RUSSIA

It is said that 86,670 tons of seed will be bought in Russia, using the funds of the recently established Union Agricultural Bank. Trade Commissioner C. J. Mayer, Riga, reports that 442,381 tons of seed grain will be needed next season, and stock on hand does not exceed half of this amount. It is intended to cover this through granting credit to peasants and through purchases of grain effected by the states.

GREAT LAKES NAVIGATION PROBLEMS DISCUSSED

An important meeting was recently held in Montreal of the Dominion Marine Association. Most of the matters considered related to bettering conditions in connection with Great Lakes navigation. Betterment of this traffic should eventually result in greater service and possible economies. Some reference was made to a revision of grain fees, but the greater part of the time was devoted to recommendations on engineering projects.

ELEVATOR SYSTEM IN ARGENTINA

A recent publication by the Argentine Ministry of Agriculture presents the strongest possible statement of an official character in favor of installing up-country elevators. It is a source of considerable surprise to the outsider to find that the handling of the harvest of Argentina falls to a couple of powerful firms insofar as the export and sale abroad is concerned.

This year's crop is worth nearly \$500,000,000, and this fact makes apparent the importance of the Government's present concern about the groove into which this trade has moved. The 1922-23 crops were 5,300,000 tons of wheat, 4,473,000 tons of maize, 1,208,000 tons of linseed, and 807,000 tons of oats. This year's return is already known to be higher for wheat, linseed, and oats, while maize promises well and is expected to yield over 5,000,000 tons.

The cost of handling the harvest, estimated on a basis of 10,000,000 tons of cereals, has been calculated by the Ministry of Agriculture at \$40,500,000, under the system actually practiced. This system necessitates threshing and bagging the grain at the farm, carting it to the railroad, transshipping at the port and in many cases opening the bags and shipping the grain in bulk. If, on the contrary, a system of country elevators were introduced, the same authority gives the opinion that the movement and shipment of the year's harvest would cost about \$17,500,000. There would be other benefits aside from the saving in handling cost arising from handling cereals in bulk.

It becomes apparent that in the natural increase of grain production in Argentina and the necessity for their meeting world competition they will develop the elevator system before long if it is at all consistent with other factors. Some authorities believe the only serious factor to act as a drawback lies in the commercial legislation in Argentina, and are now advocating revision of some statutory limitations.

REGULATIONS FOR DUST
EXPLOSIONS

The following regulations have been adopted by the Committee on Dust Explosion Hazards of the National Fire Protection Association. They constitute a revision of the report made last year and will probably be permanently adopted.

PREAMBLE

These regulations are recommended provided such regulations are made particularly applicable only to elevators erected subsequent to the adoption of this report.

HOUSEKEEPING

Good housekeeping and clean premises are the first essential to the elimination of the explosion hazard. Consequently the adoption of the following regulations is not intended to lessen in any way the responsibility of the owner or operator in this respect.

CONSTRUCTION

A. Buildings

1. All buildings shall be constructed entirely of fire-resistant materials.

2. Construction shall be such that all interior walls, including bin walls, shall be smooth, and free from pockets or ledges that will permit the accumulation of dust. In special cases where it is not practicable to entirely eliminate ledges, then such ledges shall be finished with smooth surface and shall be made as steep as possible. All pipes, conduits, etc., that of necessity are exposed, shall be fastened to walls or ceilings in such a manner as to present a minimum surface for the collection of dust.

3. Roofs and side walls of belt conveyor galleries, the side walls of all cupolas above bins, and all curtain walls below bins, shall be so constructed as to offer minimum resistance to explosive energy.

Note.—Such construction should preferably be of light material such as galvanized iron, corrugated zinc or corrugated asbestos, or may be of brick, tile or granite of light construction. Concrete may be used if window area is provided in accordance with Section 7. For cupola construction this requirement applies only to the curtain or panel walls between columns.

4. (a) The track shed, or building in which the operations of loading and unloading cars are carried on, may be built immediately adjacent to the working house; but in such case shall be separated from the working house by a solid dust-proof partition of light material. Fixed windows may form a part of the partition. Doors in the partition are not desirable; when necessary, they shall be of the self-closing type.

(b) All other buildings forming a part of, or an adjunct to, the elevator proper, shall be separated from each other by as great a distance as is practicable. Connections between buildings shall be only by belt galleries, tunnels or spouts. Tunnels between buildings when not wholly underground shall be provided with natural light, and in all cases shall have adequate ventilation. At points where galleries or tunnels are connected to main buildings, partitions or fire doors shall be provided. These partitions shall be solid except for the entrance doors and apertures for conveyor belts. The entrance doors shall be hinged to swing into the tunnels, and shall be so arranged as to be self-closing. Small doors or slides equipped with fusible links, or automatic closing devices, as best adapted to particular conditions, shall be provided, to close the apertures for conveyor belts in case of fire or explosion.

5. All working house bins shall be covered, and it is recommended that bins in the storage annex be covered. The side walls of all covered bins shall extend solidly to the roof of the bins, there being no connection between bins. All covered bins shall be vented to the outside atmosphere except that interior working house bins may be vented into the story over bins, when on account of mechanical difficulties it is impossible to vent such bins to the outside atmosphere. Vent pipes shall be of sufficient size for the purpose intended.

6. Tunnels and basements shall extend as much above natural ground level, and shall be as large and roomy as is practicable. All tunnels and basements shall be dry, and shall have all the natural light possible to obtain, either by means of windows, areaways, or sidewalk glass.

7. All buildings and operating rooms shall be provided with a large area of windows, or a combination of windows and louvers; minimum allowance to be as follows:

For cupolas and for drier building, 40 per cent of the free wall area (space between columns).

For track shed and first story of other buildings, 50 per cent of free wall area (space between columns).

All windows shall be glazed with plain glass, and shall be easily operated at all times. Windows shall be arranged to provide the maximum ventilation when open, and shall be preferably of the hinged or tilting type.

8. Ends of working house first story, and the track shed, shall be equipped with rolling steel or incombustible sliding or swinging doors. Exterior side walls of working house and track shed may be equipped with similar doors, if found more practicable than windows, except that, when the working house and track shed adjoin, the common partition wall shall be permanent, as specified in Section 4.

9. Basements of all buildings shall be of such construction as to permit the free circulation of air to all

parts. Basements of all storage annexes more than 100 feet in width shall be vented by air shafts exhausting above the roof, or by other approved method. When the natural ventilating capacity is not sufficient to provide one complete change of air per hour, fans or blowers shall be provided. To provide adequate air inlet in basements, at all times, permanent openings shall be provided in addition to the doors and windows. Roofs of track sheds, drier buildings, galleries, and all cupolas, shall be provided with sufficient monitors or ventilators to insure, in conjunction with the windows, one complete change of air per hour, in the area thus ventilated.

10. All stairways and passenger elevators shall be enclosed in fire-resistive partitions, with self-closing doors.

11. Fire escapes shall be provided for all main buildings of the elevator in accordance with state or city regulations.

B. Equipment

12. All elevator leg casings shall be of steel or concrete and all spouts and screw conveyors shall be constructed of steel. Leg casings, spouts and screw conveyors shall be so designed and so constructed as to be dust-proof.

13. Where it is necessary, for convenience of operators, to provide doors or openings in the leg casings, spouts or screw conveyors, such openings shall be provided with dust-proof covers.

14. In so far as possible all spouts shall be fixed, with the exception that portable spouts may be used in the first story of the working house, and Mayo or telescope spouts may be used on the bin or distributing floor in the cupola. Open ends of all spouts that are liable to emit any volume of dust through back pressure shall be provided with hinged dampers or valves. All spouts passing through building walls shall be equipped with dampers or valves with suitable stops.

15. All conveyor belts delivering grain to an elevator leg shall be equipped with some type of mechanical or electrical governor or control that will automatically stop the conveyor belt motor when the leg chokes or slows down.

16. All elevator legs should be provided with non-chokable boots.

17. Elevator legs should be provided with automatic back-stops.

18. All motors driving elevator legs shall be of such capacity as to enable the leg to elevate the maximum amount of grain that can be delivered by the largest single tributary spout or conveyor. All leg motors shall be equipped with an overload relay attachment which will automatically stop the motor in case of choke at the boot—leg motors shall also be equipped with no-voltage release. When elevator legs are driven by a line-shaft then they shall be equipped with an automatic signal, either visual or audible, or both, that will register when the leg begins to slow down, thus indicating to the operator the possibility of a choke at the boot.

19. Ball or roller bearings shall be used on all fans and cleaning machines and whenever practicable on belt conveyors, trippers, elevator boots and motors. On all equipment not readily adaptable to the use of ball or roller bearings the standard type bearing best suited to local climatic conditions may be used.

20. All cleaning machines shall be set a sufficient distance above the floor to permit of easy cleaning around and under them. In no case shall machines be set less than eight inches above the floor.

21. All belt conveyors shall be raised a sufficient distance from the floor to permit of easy sweeping under them.

22. All machinery shall be constructed of fire-resistive materials.

C. Driers

23. All drier units shall be placed in a separate building.

24. Each drier unit shall be separated from others by means of light dust-proof partitions.

25. Garners over driers shall be constructed of either steel or concrete, preferably closed on top, and when so closed vented to the outside atmosphere.

26. Grain may be transferred to or from the driers by means of spouts or conveyors. Spouts to drier garners shall be carefully connected to prevent dust escape.

27. The coils in driers shall be so constructed as to prevent any accumulation of dust on same.

28. Drier fans shall be located in rooms segregated from the balance of the equipment by means of light partitions.

29. Motors for fan drives shall preferably be direct connected.

30. Hoppers under cooling section of driers shall be of steel or concrete, and dust proof.

31. The floor or floors in drier section proper shall be of gratings.

32. Dust hoppers connected to live dust pipes shall be provided under such gratings.

REMOVAL OF DUST

A. Suspended Dust

33. All elevator heads, elevator boots, garners and scale hoppers, scale discharge spouts, fixed belt loaders, and belt discharge receiving spouts shall be provided with adequate positive air aspiration, so arranged as to collect only the floating dust that might otherwise escape into the building. This installation shall conform with the findings of the Underwriters' Laboratories as embodied in their report Miscellaneous Hazards 1148, entitled "An Investigation of the Suction Method of Control of Floating Dust in Terminal Grain Elevators."

34. All drier units shall be provided with an adequate system for the removal of dust created through the operation of driers.

35. All cleaning machines shall be equipped with dust collecting systems.

36. All dust collectors shall be of cyclone type, at least 90 per cent efficient, and shall be located outside the elevator buildings.

37. All dust collectors shall exhaust 10 feet or more above the roof of the plant, or be so arranged that there will be no opportunity for the dust from the exhaust to get back into the elevator.

B. Static Dust

38. All elevators shall be equipped throughout with some type of pneumatic, or other effective system for the removal of static dust. The use of a pneumatic system is recommended, except in basements or first floors.

39. So far as practicable, the use of brooms and brushes, for dust removal, shall be discontinued and more modern apparatus installed. Proper construction will help minimize the need for the brush.

40. For removal of dust from motors, drier coils, and other inaccessible surfaces, all elevators shall be equipped with a compressed air system, operating at from 80 to 100 pounds pressure. Either a fixed compressor, with suitable piping and hose, or a portable compressor set, may be used. When the latter is used, it shall be provided with a tank of sufficient capacity to maintain pressure for a considerable length of time, making it unnecessary to bring the tank to pressure while in the elevator.

ELECTRICAL EQUIPMENT

41. All electrical wiring and equipment shall be installed in accordance with the National Electrical Code.

NEW FLOATING ELEVATOR AT VANCOUVER

Now that floating elevators have been introduced in nearly all large grain ports of the world, it has been decided that Vancouver will have one from which ships from all parts of the world will take Canadian grain. Workmen are now engaged in refitting the hulk of the wooden steamer *Blandford*, which was built during the latter part of the war period but on account of unforeseen conditions was never used.

The vessel is 281 feet in length and when it becomes a grain transfer lighter it will have two 36-inch conveyors running the full length of the ship, and after the grain is carried to an elevator at one end it will be elevated and spouted in the usual way into cargo ships that are waiting. The new floating elevator will be capable of discharging her entire cargo within five hours, and will carry approximately 4,000 tons. She has been divided into three large holds, and all the engine room and boiler space is being fully utilized. Equipment will permit of handling sacked grain as well as bulk grain.

The *Blandford* will be renamed the *Blatchford*, after the mayor of Edmonton, who is also the president of the British & Oriental Grain Company. The company will use the new *Blatchford* in connection with their operation of the Woodward Elevator.

UNITED STATES GRAIN EXPORTS

Records of exports of grains from principal ports of the United States indicate that since July 1, 1923 over 66,000,000 bushels of wheat were shipped. Shipments to countries in other than the European and Canadian areas have practically tripled the figure recorded in a like period the preceding year, in spite of the anticipated decreases in other sections having materialized. The decrease in shipments to Italy brings the figure to less than one-fifth of last year.

Exports of barley, according to the Department of Agriculture, are recorded as 9,267,000 bushels. The portion going to the United Kingdom is a far greater percentage of the total than a year ago, though a corresponding decrease is noted for the other European countries.

Corn exports are 15,142,000 bushels, oats, 1,037,000, and rye, 9,730,000. The largest decrease is in oats, in the case of which commodity the preceding year showed 17,480,000 bushels.

While decreases are shown in all grain exports, wheat flour has increased in exports over 2,000,000 bushels since last year.

**PHILLIPS MAKES GOOD EARNINGS**

Phillips Petroleum in the first quarter earned about \$6,000,000 after all fixed charges and Federal taxes but before depreciation and depletion, it was estimated officially yesterday. This is equivalent to \$4 a share on the outstanding stock.

RAILS STRONGER

Competent judges of the railroad situation are estimating railroad earnings for the year at about \$75,000,000 higher than the approximately \$1,000,000,000 earned for 1923. This would mean a return of near 5½ per cent on the increased valuation of railroad property, as against the return of 5.11 per cent realized last year.

ALLIED CHEMICAL IN STRONG POSITION

Report of Allied Chemical & Dye Corporation for year ended December 31, 1923, shows net income of \$19,148,471 after expenses, depreciation and federal taxes, equivalent after preferred dividends, to \$7.53 a share earned on outstanding 2,177,843 shares of no par common stock. This compares with \$15,114,954, or \$5.68 a share, in 1922. Surplus after dividends was \$7,781,632, against \$3,769,256 in previous year.

NEW STOCKS ON EXCHANGE

The following stocks have been admitted to trading on the New York Stock Exchange: Yellow Cab Company, Inc., 400,000 no par shares; Corn Products, 2,500,000 shares \$25 par value common; American Water Works & Electric Company, Inc., \$9,050,000 of 7 per cent cumulative first preferred, \$10,000,000 of 6 per cent participating preferred stock, \$10,000,000 common; Hudson Motor, additional 120,050 no par shares; Park & Tilford, Inc., 200,000 no par shares.

TANK CAR ACTIVITY

General American Tank Car's plants are booked up until practically the close of the third quarter. The company's fleet of tanks is also over 99 per cent leased well ahead. While earnings figures for the first quarter of 1924 are not yet available it is known that net profits were substantially better than in the corresponding period of last year. In 1923 Tank Car earned \$4.65 a share on its 253,570 common shares. The company recently started the production of milk tank cars.

UTILITIES GOING INTO STRONG HANDS

Merging of public utility companies into larger systems continues apace throughout the country, in thus continuing a tendency which has been increasingly evident in recent years, paralleling the railroad consolidations of an earlier era. The most important reason for this is the development of super-power, making it more economical to tie in smaller utilities the less crowded parts of the country into a single system. Easier financing arrangements are also important considerations.

RAIL FIGHT IMMINENT

Formal application of the Pennsylvania Railroad to take over the great system of the Norfolk & Western Railroad is expected by the Interstate Commerce Commission.

Acquiring the properties of the Norfolk & Western by the Pennsylvania will undoubtedly precipitate one of the biggest railroad fights ever staged before the Commission. The Baltimore & Ohio will not for a moment stand by and see this valuable stretch of southern railroad taken over by the Pennsylvania. It is believed that the Baltimore &

Ohio will not lose any time in protesting against the Pennsylvania's latest consolidation move. Norfolk & Western properties have been sought by both the Pennsylvania and the Baltimore & Ohio for years, and it was not until recently that officials of the Norfolk & Western had indicated any acquiescence in its properties being controlled by other railroad interests.

NEW HEAD FOR NEW YORK CENTRAL

Directors of New York Central on April 9 elected P. E. Crowley president of the road and it was rumored, although not confirmed, that they had before them a plan to purchase from the minority stockholders their interest in the Pittsburgh & Lake Erie. This report circulated coincident with an advance in the latter road's stocks. New York Central already owns considerably more than half of the smaller road's stock, but is understood to be desirous of acquiring all of it.

NORTHERN PACIFIC EARNING DECREASE

The Northern Pacific Railway Company reports for 1923 net income of \$12,981,426, equivalent to \$5.23 per share on the \$243,000,000 of common stock outstanding. In 1922 the balance on the common was \$6.07 per share.

The report shows the company had at the close of 1923 current assets of \$38,287,279 and current liabilities of \$19,026,215, leaving current net assets at \$19,261,064. During the year the company spent \$14,022,694 for maintenance of way and \$19,043,158 for maintenance of equipment.

NEW RAIL SECURITIES

Georgia & Florida Railway Company has been granted permission by the Interstate Commerce Commission to issue \$1,600,000 of receivers' certificates, \$800,000 of which are to be pledged with the Secretary of the Treasury as substituted security for a loan from Government and the remainder are to be sold or otherwise disposed of.

Application of the Georgia, Southern & Florida Railway Company for authority to issue \$438,000 of 5 per cent debenture bonds exchangeable for certain first mortgage bonds of the Hawkinsville & Florida Southern Railway was approved.

THE OUTLOOK IN EUROPE

"Conditions in Europe are really encouraging," said Samuel McRoberts, president of the Metropolitan Trust Company, returning on the *Olympic* from a business trip.

"Desire for trade and commerce is becoming strong among European people, regardless of politics. The Dawes plan gives Europe an opportunity to find her way out of a maze, and if she doesn't accept this plan, she knows she would be much worse off. England and France earnestly desire to promote solid business.

"France is fundamentally sound, and things are in a great shape among the people. The recent fall of the franc was really what was needed to drive the Dawes plan home to the French.

"The prosperity of our own country has every indication of continuing, and I think we should have a very successful business year in 1924."

WOOLWORTH STOCK CHANGES

Stockholders of F. W. Woolworth Company at the annual meeting May 21 will be asked to change the par value of the capital stock of the corporation from \$100 to \$25 a share, the new stock being exchanged for the present on the basis of four shares of new for one of the old. It is proposed to place

the \$25 par value stock on a \$3 annual dividend basis, or the equivalent of \$12 a share on the present capitalization, on which the current disbursements is at an \$8 annual rate. The company has 650,000 shares outstanding. The new capitalization will consist of 4,000,000 shares of \$25 par, of which 1,400,000 shares will be held in the treasury.

L & N MAKES STRONG SHOWING

Earnings of the Louisville & Nashville Railroad in 1923 were the greatest in that company's history. Gross revenues of \$136,375,673 were \$15,236,833, or 12.5 per cent, above the preceding year, \$18,889,896, 16 per cent above 1921 and \$9,078,141, 7.1 per cent, above 1920, the next highest year. Net operating income, \$20,673,143, exceeded the previous and next highest year by \$3,068,822, 17.4 per cent, and was \$14,913,504, or 258.9 per cent, above 1921. Last year's earnings were equivalent to \$11.53 a share on the \$117,000,000 capital stock, which compares with \$14.72 a share in \$72,000,000 stock in 1922.

AUTOMOBILE INDUSTRY STABILIZING

An analysis of operating statistics of motor companies in 1923 shows a large increase in number of units sold, but without the same relative gain in profits. This condition is due to a stiffening of competition with lower prices for cars and a higher cost of doing business, particularly as a result of factory readjustments caused by introduction of new models. For the first time in the history of the industry it is believed that factory capacity of the country is on a par with immediate future demand and records of the next few years will be sought in greater efficiency of operations rather than in output.

U. P. HAS FINE YEAR

Union Pacific System did the largest business in its history during 1923, with the result that earnings were the best in four years, the tremendous increase in operating costs cutting into the profits sufficiently to bring the net income down to a figure below the level during and immediately preceding the war. After all allowances, net income for the year ended December 31, 1923, amounted to \$39,922,205, which after deducting preferred dividend payments, was equivalent to 16.17 per cent earned on the common stock. This compares with net income of \$32,339,723 or 12.76 per cent on the common in the previous year.

DAWES REPORT WILL HELP EUROPE

Adoption of the Dawes reparations plan would probably improve the status of most of the minor European currencies, says the *Wall Street Journal*. By insuring continued exchange stability in Germany, which has already stimulated trade in the Balkans, it would probably mean eventual success for the stabilization attempts now being made in Czechoslovakia, Austria, Finland, Roumania, Bulgaria and Jugo-Slavia, all of which nations have kept their currencies practically stable during the past year or more. A depreciating currency in Germany makes competition by exporters of the central European states almost impossible.

OMAHA AND NORTHWESTERN TO MERGE

Complete merger of the Omaha and Northwestern Railroads, resulting in new economies of operation and an altered personnel, may be effected in the not distant future and in advance of realization of the Interstate Commerce Commission's suggested plan of general consolidation, William H. Finley, president of both railroads said recently.

He had arrived from Chicago for a conference with Omaha officials and to attend an annual meeting of stockholders at Hudson, Wis.

Mr. Finley, Chauncey M. Depew of New York, Harold S. Vanderbilt of Boston and E. S. Woodworth of Minneapolis were re-elected directors. The Board will meet in New York next week.

Preliminary plans have been worked out but the project for merger of the two closely allied roads has not progressed to a point of determination of executive personnel or the unification of working forces or operating facilities, Mr. Finley said.

DUST EXPLOSIONS IN GRAIN
ELEVATORS

BY DAVID J. PRICE*

SOME OBSERVATIONS IN EXPLOSIONS IN
GRAIN ELEVATORS

It may be of interest to note some of the observations made during the investigation of several explosions in grain elevators. As a rule more than one explosion report is heard. The first explosion is of a local nature, but produces sufficient concussion to shake loose the accumulated dust throughout the plant. This newly made dust cloud permits the propagation of flame, resulting in a secondary violent explosion which causes loss of life and damage to property. Sometimes there have been three explosion reports.

As a rule, the greatest damage is not done in or near the place where the explosion originated. In most cases the greatest destruction is found at a point far from where the explosion started. This seems to confirm the theory that the secondary explosion is a propagation of flame from the original ignition, increasing the velocity rate and pressure as the flame travels through the dust.

In the relation of origin of the explosion to the extent of destruction, dust explosions differ from gas explosions, where the gas mixture is usually localized and not spread throughout the entire plant. Consequently in a gas explosion (in which dust is not a contributing factor) the force of the explosion, greatest in the vicinity of the origin, gradually decreases and spends itself. The opposite is usually true in dust explosions. Unless these facts are remembered, erroneous conclusions may be reached in the attempt to locate the cause and origin of an explosion.

Explosions in industrial plants vary in intensity and force. In some cases very destructive explosions have been heard but a short distance away. At other times the concussion has been so great that the explosion has been heard and damage done to property some distance away. It is reported that an explosion in a flour mill at Litchfield, Ill., in 1893, was heard 25 miles away, and that there was not a house in the village that was not damaged. People living 70 miles from Cedar Rapids, Iowa, heard the explosion which occurred in a starch factory in 1919, and one woman who lived in a town 100 miles away states that she heard it. The shock of the explosion in the Northwestern Elevator at South Chicago, Ill., was distinctly felt in Benton Harbor, Mich., more than 50 miles away, and it was also heard 100 miles from Chicago.

The rupturing of heavy construction and the carrying of heavy blocks of concrete some distance from plants show that immense pressures are developed in some of these explosions. Following an explosion in an elevator in the Southwest, a piece of concrete weighing over 1,400 pounds was found more than 300 feet from the elevator. Reinforced concrete pillars, 16 by 24 in cross sectional area, were blown down and 1½ inch steel reinforcement rods were completely stripped of concrete. These columns weighed approximately six tons each and, with their reinforcements, should have withstood enormous pressures. Conveyor tunnels, covered with 16-inch concrete, were also blown apart and heavy blocks were carried some distance.

In an elevator explosion in Canada, heavy pieces of concrete cornices were blown several hundred feet from the plant and heavy eight-inch steel "I" beams were blown off, twisted, and thrown more than 100 feet. Perhaps the most destructive force known to have been developed in an explosion of industrial plant dust was generated in the Northwestern Elevator at Chicago, Ill. In one corner of the storage section, 40 bins were moved on their foundations nearly one-half foot. These bins were approximately 95 feet deep, averaging 20 feet in diameter, and built of seven inch reinforced concrete. Cracks between these and the adjoining bins and their foundation piers indicated that they were lifted. The tanks and grain they contained

would probably weigh over 300,000 tons. About 20 of these tanks were completely annihilated in one section of the plant as a result of this explosion, which gives some indication of the tremendous force of the explosion which occurred in the tunnels underneath these bins.

It has been suggested that the force of a dust explosion is usually in a lateral direction. From a study of a large number of industrial plant explosions, it is reasonable to conclude that the force is exerted in all directions at once and that it seems to go in one particular direction only because the retaining walls on that side may be weaker and give way more readily. In an explosion in the Middle West, a keen observer estimated that flames shot fully 500 feet into the air. Debris was picked up more than 2½ miles from the plant.

It may seem contradictory to state that part of the destruction caused by an explosion in a plant may be the result of suction rather than of pressure. After the passage of an explosion, however, the very high pressure developed begins to fall rapidly and a high vacuum is often formed. This seems to be borne out by tests of the Bureau of Mines in connection with work in the experimental mine. A peculiar condition was noticed in this connection in the investigation of an explosion in a Government Elevator at Port Colborne, Ont. The fact that one of the employees standing near a door in the basement of the elevator on the side opposite the boot of the elevator in which the explosion started was blown out of this door against a pillar a few feet away, indicates definitely that pressure was developed in the basement of the elevator. It was found, however, that the property damage in this part of the building indicated that a strong vacuum rather than much pressure was developed. The basement was well lighted by windows on three sides. Most of the glass of these windows was blown out of the sashes, but instead of being found outside, which would indicate pressure, it was found in small pieces all over the floor of the basement, showing that it was drawn in by suction. That this suction was great was indicated by the fact that some of the glass was found 30 to 40 feet from the walls. It is not unusual in dust collecting systems and conveyor pipes for a pipe to collapse after the passage of the explosion, instead of being blown apart by the pressure developed within. That many walls have been drawn in instead of being forced out indicates that a great deal of other damage to property is the result of suction rather than pressure.

Although dust collecting systems are usually installed for the purpose of protection, in some instances they have initiated and spread explosions. Explosions have originated in dust collecting fans from sparks struck by the blades of the fan against the sides of the casing. The explosion of aluminum dust in the Wisconsin plant originated in the dust collecting system when a piece of heavy wire got into a fan where it struck sparks which ignited the aluminum dust. The explosion propagated back through the pipe and out into the room from which the dust was drawn, causing the death of 6 girls employed there and injuries to a similar number. Dust collecting systems should be so designed that they will operate effectively and the dust will not accumulate in the suction pipes. They should be so installed that, should any explosion start and be drawn into the system, there would be no possibility of its propagation into other sections of the plant.

One peculiar phenomenon that has been noted is that many explosions occurring in industrial plants have not been heard by men working in the plant. An explosion in Cedar Rapids, Iowa, heard 100 miles away was not heard by a man in the boiler plant. In an explosion in an elevator one of the men in the basement did not hear the explosion, although he was thrown down by the force of it. Workmen in flour mills who have been injured by explosions have not heard the reports, while people around the plant heard as many as three reports.

A large number of dust explosions in industrial plants occur at the most unexpected times and originate in unexpected places. Many explosions

have occurred after the plant was closed down. Two of the most destructive explosions that have occurred recently in grain elevators started when the elevators were not in operation. In one case, however, the cause of the explosion was an unnoticed smoldering fire started just before the plant was shut down, while in the other dust was being stirred up in cleaning the grain driers. In a third instance a disastrous elevator explosion occurred when the plant was closed down and the workmen were cleaning the basement.

Although a large number of explosions have been caused by sparks from foreign material passing through grinding machines and by sparks of static electricity, destructive explosions have been caused by sparks struck in other ways. A spark struck by a hoe in the hands of a workman cleaning a dust vault into which dust was discharged from a cyclone collector was thought to be the cause of an explosion in a shoddy mill. An explosion of wood dust originated in a New England plant from sparks from an emery wheel several feet from the suction pipe into which they were drawn. Two dust explosions in grain elevators were supposed to have been caused by sparks struck by foreign material in the grain as it fell against the sides or bottom of a very deep bin. In each case only a few hundred bushels of grain had been run into the bin at the time of the explosion.

Some of the dust explosions in industrial plants have destroyed the plants so completely that it has been extremely difficult to determine their causes and the circumstances surrounding the origin of the explosions. In these cases very peculiar effects upon surrounding property have been observed. In an explosion in a starch factory in Cedar Rapids, Iowa, there was hardly a building within three quarters of a mile or more of the plant which did not feel the direct effects of the explosion, and in many cases all of the window glass was broken. On the other hand, the superintendent's office, a small one-story structure about 20 feet square, on the grounds of the mill and but a short distance from it, was not damaged in any way.

*(To Be Continued)*SUCCESSFUL FARMER OWNED ELE-
VATOR IN OHIO

An enthusiastic believer in farmer-owned elevators is E. T. Dickey, manager of the Jewell Grain Company, located at Jewell, Ohio. He is of the opinion that the farmers' business requires handling similar to any other line of business, and that only when farmer-owned elevators are organized, financed and managed right will they render a proper return and make a good showing.

Apparently, Mr. Dickey has grounds for his confidence in this theory, because he has successfully followed it. About seven years ago he became manager of the Jewell Grain Company, which has shown a creditable profit and efficient operation ever since. Previous to this he had practical farming experience, followed by merchandising experience in the grocery and agricultural machinery trade. The transition from farming to managing a grain elevator was a success, and Mr. Dickey after having served as president of the Northwestern Ohio Grain Dealers Association, and for two years as vice president of the State Managers Club, is now first vice-president of the Ohio Farmers Grain Dealers Association.

The elevator owned by the Jewell Grain Company is built compactly on a small space, and while not a large one, it has a storage capacity of 14,000 bushels, divided into nine bins. The receiving capacity is 1,000 bushels per hour. A Monitor Cleaner and a Philip Smith Corn Sheller are used.

The power equipment comprises four motors, and the machinery has been so installed that the parts not actually in use are thrown out with clutches. The motors are so located that almost all power is direct drive, using not over 20 feet of belting at any one place. As this makes it possible to run only one motor a good part of the time the economy in power bills is considerable. A good deal of the ingenuity has been exercised in laying

*From the address delivered at the annual convention of the American Association of Port Authorities, New Orleans, La., December 10, 1923. Continued from Page 622, March AMERICAN GRAIN TRADE.

out the plan of operation to eliminate avoidable waste in material as well as power.

During the course of a year this elevator handles about 175,000 bushels of grain, and this includes corn, wheat, oats, barley, rye, and Clover seed. Also feed, cement, flour and coal are sold.

The old elevator burned in 1922 but was immediately rebuilt and is completely paid for. The Jewell Grain Company having been organized in 1912, bought out the firm already in business in Jewell, and started operations with C. W. Palmer as manager. He was succeeded in 1917 by E. T. Dickey. The president of the company is J. P. Coressel, a farmer in the locality.

THE EXPORT TRADE IN GRAIN*

Terms for Domestic Purchasers of Export Grain

The grade for which seaboard exporters almost invariably bid in buying any class of American wheat is No. 2. The practice of "fobbers" in bidding the country however, is to bid basis No. 2, with the understanding that lower grades will be accepted at stated differentials and, sometimes, "sample" wheat at the market difference, while for No. 1 a stated premium is allowed. The "scale," or grade differentials, used in any given territory is usually one adopted by a committee of the members of the local grain exchange.

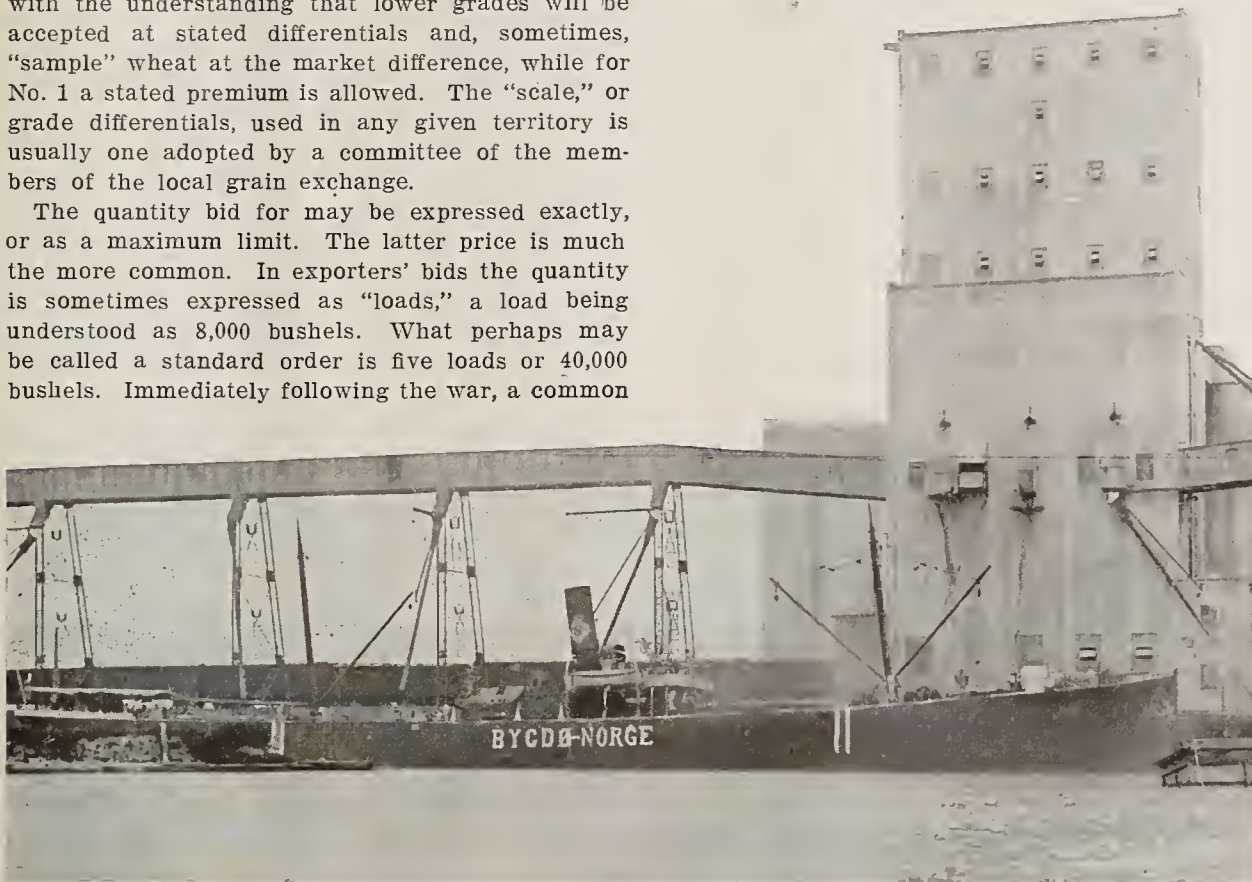
The quantity bid for may be expressed exactly, or as a maximum limit. The latter price is much the more common. In exporters' bids the quantity is sometimes expressed as "loads," a load being understood as 8,000 bushels. What perhaps may be called a standard order is five loads or 40,000 bushels. Immediately following the war, a common

the time at which the seller is in a position to deliver the documents. This point is more fully explained in later paragraphs.

It is necessary to bear in mind that purchases by exporters are usually made by seaboard firms through cash grain brokers operating in the New York Produce Exchange. The function of these middlemen is outlined in more detail later in this report.

The similarity in the bids to the country of "fobbers" and other dealers assembling wheat for export has occasionally been adversely commented upon. The fact that at any given time the bids are close together should occasion no surprise. No one familiar with practical exporting would expect any other condition.

Foreign trade is carried on in what is essentially a single market—the world market. American exporters selling to foreign buyers must, at any given time and for wheat of a certain kind and in a given position, quote substantially the same price, for the orders swing on variations of a small frac-



VESSEL LOADING WHEAT FOR EXPORT

order was 10 loads, but for the past two years the hand-to-mouth buying policy adopted by importers has forced exporters to buy in smaller lots. While exporting is distinctly a wholesale trade and large orders are handled, running up to 1,000,000 bushels or more, a large part of the business is made up of surprisingly small bookings. Individual purchases run smaller than individual sales as several purchases are often made to fill one sale.

The time of shipment, of course, varies widely. The only general rule is to make the probable time of delivery conform to the requirements under which the purchase is made. Common periods for shipment are 10 or 20 days, or for the first-half or last-half of a specific month. Most purchases are probably made for shipment, or delivery, as the case may be, within 30 days from date, although very often the time is set much farther ahead. For example, purchases are made at Duluth during the winter for shipments after the opening of navigation in the spring. Purchases made f. o. b. vessel call for delivery within a certain period, for instance, purchases made in July for first-half September loading. When so made, the seller must have the grain ready for the buyer's call on any day from the first to fifteenth of month named. Purchases on terms other than f. o. b. vessel usually specify a time for shipment, not a time for delivery.

The terms of payment are always cash, but the time that payment can be required depends upon

tion of a cent a bushel. If the seller can not keep in line he might as well keep out.

Exporters who are selling under such conditions must necessarily at any given time and for a stated grade of wheat in a certain position offer very similar prices for supplies, for the bidder who is one-half cent out of line will get few acceptances. Their bidding is made more close than might otherwise be the case by the universal custom of trading by grade in oversea transactions and the practice of broadcasting bids through seaboard brokers who are in constant communication with all prospective sellers.

Consequently, the "fobbers" and other assemblers of country wheat for export receive practically identical offers at the same moment. Naturally, working upon the same sales opportunity, they must procure supplies at practically the same cost, in order to get a share of the business. The terminal dealers' custom of using brokers in country buying, and the establishment of official closing prices in grain exchanges as a basis for bids sent to the country also tend to keep the offers of different buyers closely in line.

Spot Wheat

Spot wheat, or wheat on track or in store at Atlantic and Gulf ports, is a minor but convenient source of supply.

The spot stocks at Atlantic ports consist of shipments by terminal elevator companies, "fobbers," and near-by country dealers made in the expectation of a demand for grain for prompt loading, and of wheat brought forward by exporters to fill orders or in anticipation of future business. The hand-to-

mouth buying practiced by importers following the war encouraged carrying wheat at seaboard. As a rule, however, the stocks are not large. As compared with primary markets, the elevator capacity at seaports is small.

In the Southwest, it is common practice for country elevators and shippers to forward wheat to the Gulf to be sold in transit or on track. Gulf exporters and "fobbers" also bring down supplies from the country. In certain seasons burdensome stocks have accumulated. Wheat is more likely to accumulate at the Gulf than at Atlantic ports because there are no large inland assembling or storage markets south of Kansas City and St. Louis. Grain seeking an outlet by the Gulf moves very largely direct from the country to Galveston and New Orleans, and is assembled at these ports in quantities and grades suited to foreign orders.

Spot stocks are also in part the result of miscalculations of one sort or another. A boat chartered to carry a full cargo may not arrive when expected, thus causing a temporary addition to spot supplies; or an exporter having billed shipments to a certain port may charter space at another port and fill his order from later shipments; also, failures to effect sales rapidly enough to take care of wheat arriving at seaboard are of common occurrence. Buyers for shipment to the Gulf bid the country basis No. 1 or No. 2 and accept lower grades at a discount. Consequently, they can not forecast exactly the grades they will receive and are often forced to carry for a time oversupplies of certain grades. Another cause of accumulation on spot is as follows: Purchases, for example, may be made for shipment within a given period, say, first-half August shipment, in expectation of last-half September loading. If the sellers forward the grain earlier than expected, the buyer becomes loaded up before he can ship. This is likely to happen on a declining market. Good roads and heavy receipts at country elevators may also bring about an early movement and result in accumulation at seaboard. So, in one way or another, considerable supplies are at times brought together in seaboard elevators and railroad yards, though never in the quantities common at the large interior receiving markets.

(To Be Continued)

WEEVIL AND STORED GRAIN

In ordinary speech any small beetle that infests grain is called "weevil." There are only two true grain weevils—the granary weevil and the black, or rice weevil. The granary weevil attacks only stored grain while the black weevil not only develops and lives in stored grain but may do the same in ripening grain in the field. But the black weevil rarely infests grain in the field in the more northern portions of the country.

Besides the true weevils other insects that attack grain are often called weevils. Such are the cadelle, the saw-toothed grain beetle and others. The first stage of these enemies of stored grain is a larva or grub. The true weevil develops within the grain; some of the others feed externally and do not feed within a single grain. The losses resulting from the depredations of weevil and their allies in stored grain are often very large, including a decrease in the weight of grain, the loss of value as seed and unfitness for human food or animal feed. Professor Davis, entomologist at Purdue University, calls attention to the fact that holding grain from year to year is likely to increase damage from insect pests.

THE AREA of Winter wheat seeded for the world crop of 1924 reported to date, outside of Russia, is 109,000,000 acres, compared with 115,000,000 acres last year in the same territory, which was nearly one-half the total area reported last year. Canada shows a reduction in the area prepared for spring seedings. In Argentina relatively good corn prices are giving encouragement to expansion of the corn area. All things considered the outlook for the market of our next year's crop is more favorable than it has been for the past season, say a number of authorities on the subject.

*The results of a survey by the Department of Commerce on the methods and possibilities of shipping grain abroad. Continued from Page 621, March, AMERICAN GRAIN TRADE.

NEWS LETTERS

KANSAS CITY

B. S. BROWN - CORRESPONDENT

FAIRLY liberal deliveries of wheat on May contract at Kansas City are expected. At present conservative estimates of the probable total are around 4,000,000 bushels, although it is admitted that many things can happen to affect the situation. Elevator stocks are around 11,000,000 bushels, or a little more than twice as much as a year ago. In other quarters the opinion was expressed that a larger quantity of local stocks was sold out of store for deferred shipment than the trade generally realized. One elevator man placed the amount at 3,500,000 bushels. "Mills over a wide territory," he said, "have small stocks on hand and with a light current movement they are forced to come to a terminal market for supplies. Of the wheat remaining in elevators which is unsold I do not believe more than 1,500,000 bushels will run 12 per cent protein or better. Good premiums will be paid on the balance of higher protein wheat here."

"On 13.3 per cent protein, 20 cents over Kansas City May was paid recently, which is an increase of 10½ cents over the basis obtaining March 1. On 14 per cent protein, 28 cents over the Kansas City May price was paid, which is 10 cents higher than a month ago. Wheat testing 12½ per cent brought 13 cents over the May price, six cents higher than a month ago. Ordinary wheat premiums also have advanced."

George S. Carkener of Goffe & Carkener, and Mrs. Carkener, were held up in their home recently by two bandits who escaped with loot valued at \$1,535. Mr. Carkener, who was expecting a telegram, had gone to the door in answer to a ring. Before opening the door he inquired who was there and was told there was a message for him. As he opened the door the bandits drew pistols and stepped inside. Mrs. Carkener was talking over the phone at the time. One of the men cut the wires. They took a bar pin valued at \$1,000 from Mrs. Carkener and \$35 and a ring valued at \$500 from Mr. Carkener.

The Kansas Wheat Growers Association, which has a membership of 7,000 farmers, recently purchased the Kansas Central Elevator at Leavenworth, Kan., from Ben C. Moore, receiver for the Moore-Lawless Grain Company. The consideration was \$80,000. The plant, which has a capacity of 450,000 bushels and is modernly equipped in every way, was appraised at \$150,000 at one time. The elevator will be taken over about May 1. It will be used for storing grain pooled by the Association. C. E. Cox, C. J. Cox, G. A. Keller, Ernest R. Downie and H. B. Wilye, officers and directors of the Association, closed the transaction.

James B. Mitchell of the Morrison Grain Company has been elected a member in the Kansas City Board of Trade on transfer from L. W. Sanford of the Mid-Continent Grain Company.

The first steel in the new Board of Trade Building was placed in position several weeks ago. Work is progressing according to schedule, it was said. It is planned to have the building ready for occupancy the last of the year. The building is being erected at Tenth and Wyandotte Streets and will have two wings with a decorative arcade between.

A decision adverse to grain shippers of the Southwest and Omaha territory, involving several million dollars in rate litigation, was handed down recently by the circuit court of appeals at St. Louis in reversing a decision of District Judge Woodrough of Omaha. The case was remanded for a new trial.

The Kansas City Board of Trade, the boards of trade in St. Joseph, Wichita and Atchison, the Southwestern Millers League and a large number of other shippers of grain, grain products and hay had filed briefs in the Omaha case—the Merriam & Millard Grain Company against the Burlington Railroad. R. A. Jeanneret is plaintiff for the shippers in this territory.

The original action was taken to recover freight charges paid by members of the boards of trade, mills and country shippers in the territory in excess of

the rate fixed by the Interstate Commerce Commission in an order made November 21, 1921 in which all railroads were directed to put into effect a lower rate on grain, grain products and hay, effective December 27, 1921. The claims against the railroads date from October 21, 1921 to January 7, 1922.

The attorney for the Kansas City interests said the case would be appealed to the Supreme Court.

C. B. Wilser of the Wilser Grain Company spent most of February in Cuba.

Members of the Kansas City Board of Trade have adopted an amendment which provides that No. 1 or No. 2 White oats may be tendered on contract at a premium of one-half cent a bushel. The difference heretofore has been 1½ cents. Tender of No. 3 White oats testing 26 pounds or better is deemed valid. The change becomes effective with the July delivery.

A new freight tariff making grain and flour rates applicable to all industries on equal terms in greater Kansas City, has been filed by the Rock Island with the Interstate Commerce Commission and will become effective April 29. The road filed a tariff schedule February 5 limiting transit arrangements to mills and elevators on its own tracks. A protest was filed by the Board of Trade, alleging discrimination against grain interests located on other lines.



NEW HOME OF KANSAS CITY BOARD OF TRADE

The Commission refused to grant the suspension. A resolution was then adopted by the Board of Trade pointing out unfairness of such a schedule which resulted in a decision by Rock Island officials in Chicago to eliminate all alleged discrimination and amend the tariff to place all industries on an equal rate basis.

The Kansas City plant of the Corn Products Refining Company will close down some time this month, officials said recently. At the time the company had on hand 350,000 bushels of corn and was grinding at the rate of 85,000 bushels a week. Several weeks prior to this the plant was using 140,000 bushels a week.

The Southwestern Millers League will hold its annual meeting at the Hotel Baltimore, Kansas City, April 23. This is a day ahead of the meeting of the Millers National Federation in Chicago. Most of those in attendance here will go on to Chicago.

R. Y. Smith discontinued the Smith Grain Brokerage Company on April 1 in order to operate the Farmers Co-Operative Association elevator at Norfolk, Neb., which he has leased. He will retain his membership in the Kansas City Board of Trade, which he has held since 1910.

Wheat receipts at Kansas City in March were 1,938 cars, the lightest of the season and 38 per cent smaller than in February. Compared with a year ago, there was a decrease of 26 per cent and with the 10-year March average a decrease of 9 per cent. Corn receipts, 1,669 cars, were only a little more than

half as large as in February, but were 15 per cent larger than the March average. The latter part of the month both wheat and corn movement dropped to a few cars a day, with wheat down to the lowest level in more than four years and corn the smallest in more than a year.

Around the first of the month when corn stocks here were about 2,000,000 bushels, local handlers estimated that about half had been sold for April, May and June shipment, mainly to the South.

PHILADELPHIA

B. F. DORAN - CORRESPONDENT

PHILADELPHIA lost one of its two domestic elevators last month when the elevator of the Philadelphia & Reading Railway (now the Reading Company) at Twentieth and Callowhill Streets was destroyed by fire with a loss of \$1,000,000. Another elevator on the property of the old Bergdoll Brewing Company, Twentieth and Parrish Streets, has been secured by the company and is now receiving shipments.

The Port of Philadelphia will have facilities for storing 7,000,000 bushels of export grain upon the completion of the new Reading Elevator at Port Richmond, which will have a capacity of 2,500,000 bushels and cost \$2,500,000. Frederick Japerson, engineer in charge of the plans, has informed Hubert J. Horan, president of the Commercial Exchange, that the work of clearing the site will be started at once and actual construction of the new plant will be under way June 1. As a result of a conference between officials of the railroad and grain shippers it has been decided to equip the elevator with six conveyors instead of four, as had been originally planned.

During the month of March the Girard Point Elevator of the Pennsylvania Railroad unloaded a total of 1,295 carloads of grain, as follows: Wheat, 974; corn, 303; barley, 18. In the same period the Philadelphia Grain Elevator Company handled 697 cars at Port Richmond, of which 507 were wheat; 112 corn, and 178 rye. At its Twentieth Street Elevator the company handled 19 cars of oats, and one each of mixed grain, kafir corn, wheat, corn and barley.

Pennsylvania Railroad system embargo has been placed on hay and straw from all points, to all consignees, consigned to the Kensington Station, including the Merchants' Warehouse.

Daniel J. Murphy, a stevedoring contractor, entertained members of the Commercial Exchange with a trip to Atlantic City and a few rounds of golf on Tuesday.

Thomas K. Sharpless, member of the firm of Brey and Sharpless, Bourse Building, dealers in flour, feed and grain, died at White Haven, Pa., March 26. He was president and general manager of the Columbia Flour Milling Company, Columbia, Pa., a director of the Commercial Exchange and first vice-president of the Flour Club of Philadelphia. He was a hard worker for the trade in the eastern territory.

Eastern wheat growers in the future will have to produce the highest grade milling wheat and develop the home markets, rather than depend on the export trade, Hubert J. Horan, president of the Commercial Exchange, told members of the National Association of Marketing Officials in session here last month.

A drive for new members on the Commercial Exchange resulted in the names of 13 applicants being posted April 1. They are: The Wilmington Provision Company, Wilmington, Del., proposed by W. T. Riley and F. C. Rogers; Arbogast & Bastian Company, Allentown, Pa., proposed by W. T. Riley and F. C. Rogers; E. Frank Lavan, 134 North Delaware Avenue, this city, proposed by F. M. Hall and W. T. Riley; Fred B. Carter, 24 South Delaware Avenue, this city, proposed by F. M. Hall and F. C. Rogers; George H. Rader, Reading, Pa., proposed by F. M. Hall and W. T. Riley; Frank B. Weiland, Phoenixville, Pa., proposed by F. M. Hall and F. C. Rogers; Charles W. Payne, 301 Drexel Building, this city, proposed by F. C. Rogers and Frank C. Reed;

F. G. Vogt & Sons, Inc., Thirtieth and Race Streets, this city, proposed by F. C. Rogers and Frank C. Reed; William Moland's Sons, Inc., 120 Market Street, this city, proposed by F. C. Rogers and C. Joseph Adams; A. H. March Packing Company, Bridgeport, Pa., proposed by F. C. Rogers and Frank C. Reed; Harry Lax, 267 North Front Street, this city, proposed by F. C. Rogers and Frank C. Reed; The Philadelphia Transportation Company; The Kingan Provision Company.

Several offers have been received by Charles H. Birr, trustee in bankruptcy for Shane Bros. & Wilson Company's Millbourne Mills, Sixty-third and Market Streets. One of the tenders to purchase was made by a coal company, another by a lumber company and a third by a real estate operator. To the trade it appears as though the plant will never again operate entirely as a flour mill.

Stocks of flour in public warehouse in Philadelphia April 1 were 144,220 barrels as compared with 136,301 barrels on March 1, 1924, and 211,072 on April 1, 1923. Other grains on hand April 1 compared with the previous month were as follows: Wheat, 1,394,906 bushels as against 1,486,876 bushels; corn, 352,277 bushels, as compared with 252,094 bushels; oats, 65,544 bushels, as compared with 120,121 bushels; rye, 169,217 bushels, as compared with 60,865 bushels, and barley, 29,938 bushels, as compared with 2,912 bushels.

Exports of virtually all grains through the Port of Philadelphia during March fell below the figures of the previous month. The March exports were: Flour, 26,366 barrels; wheat, 2,562,483 bushels; corn, 514,503 bushels; oats, 38,893 bushels, rye and barley none. Receipts during March were: Flour, 197,248 barrels; wheat, 2,427,857 bushels; corn, 878,877 bushels; oats, 142,653 bushels; rye, 93,819 bushels, and barley, 31,336 bushels.

An effort to have the railroads entering this city grant equal warehouse privileges to independent as well as terminal warehouses has been started by manufacturers doing a yearly business in this trading area of many millions of dollars annually in foodstuffs alone. A committee of 15 has been appointed to consider the question. So-called railroad terminal warehouses are now permitting 48 hours free storage and making no handling charges during the period on all goods coming over certain railroad lines the charge being absorbed by the railroad.



MILWAUKEE grain receipts for March again dropped below the March record of last year by more than 600,000 bushels, the totals being 4,606,410 bushels received for the past month and the total for the same month last year 5,220,530 bushels.

The decline in grain supply for March was in the face of very large receipts of corn, the gain in this commodity being almost 700,000 bushels. In fact all of the other four grains but corn showed a slump in receipts for the past month. The flour receipts for March were 125,930 barrels against 78,840 barrels for the corresponding month of last year. The shipments of flour on the other hand did not show any unusual changes with 89,610 barrels in March, 1924, against 90,590 barrels for the corresponding month of last year. Taking last month alone, the figures on receipts were 125,000 barrels as compared with shipments on 90,000 barrels, receipts exceeding shipments by about 35,000 barrels. Feed receipts at Milwaukee for the past month were considerably larger than a year ago, the figures being 3,550 tons for last month and 870 tons for the same month of last year.

Shipments of feed on the other hand showed a decline, the figures for the past month being 25,559 tons compared with 28,010 tons for the corresponding month of last year. The shipments of grain from Milwaukee for the month of March indicate a slump of about 843,000 bushels from last year. Total shipments for the past month of the five leading grains were 3,463,751 bushels and 4,306,899 bushels for the corresponding month of last year. Corn shipments dropped more than 400,000 bushels, indicating large local consumption and also somewhat increased storage.

The hay supply showed a considerable gain with receipts of 1,644 tons against 1,296 tons for the corresponding month of last year. The shipments of hay for March were nil as compared with shipments of 1,418 tons for the same month of last year.

A number of Milwaukee shippers and traffic experts have been given places on the Regional Advisory Board formed under the auspices of the American Railway Association. The Board was organized to iron out differences arising between railroads and shippers in the Wisconsin territory as well as contiguous sections. J. L. Bowlus, manager of the Transportation Department of the Milwaukee Chamber of Commerce, was made alternate general chairman. H. W. Gehrke, manager of the Transportation Division of the Milwaukee Associa-

tion of Commerce, was made a vice-chairman of the Wisconsin district Commercial Organization Committee; F. C. Bryan, traffic manager of the Allis Chalmers Manufacturing Company, general chairman of the Machinery Committee; and William A. Hottensen, vice-president of the William Bell Company, grain concern, vice-chairman of the Grain Committee.

Grain in store at the close of business on April 5 was given at 303,000 bushels of wheat, 1,516,000 bushels of corn, 635,000 bushels of oats, 72,000 bushels of barley and 862,000 bushels of rye. Large supplies of grain are the rule at Milwaukee just before navigation opens on the Great Lakes.

No. 3 barley has been selling recently at 78 to 86 cents a bushel as compared with 66 to 71 cents for the same time a year ago. The No. 3 White oats is selling around 48 cents as compared with a rate of 45 to 46 cents for the same time last year. No. 3 rye is still considerably cheaper than last year with prices now around 65 cents as compared with 83 to 84 cents for the same time last year.

The Milwaukee Chamber of Commerce has not taken any action as yet on the question of changing over to day light saving on April 27 when the time will be changed in New York and Chicago. The Milwaukee grain market, however, will be faced with considerable difficulties if they do not change over, hence it is predicted that Milwaukee with trade in line with Chicago and New York, just as was done last year.

J. L. Bowlus, who has been head of the Transportation Department of the Milwaukee Chamber of Commerce for some time, has been reappointed. The Board of Directors recognized his services and readily placed him in charge of this work again.

The receipts of grain here have been so light recently that industries and shippers have competed sharply for the small supplies and prices have gone up for some of the grains.

The April rate of interest on advances has again been fixed by the Finance Committee of the Chamber of Commerce at 6½ per cent. This is the same as the rate which has ruled for many months indicating a relatively stable money market.

The Badger Grain Company at Green Bay, Wis., through its secretary-treasurer, has filed a petition in bankruptcy in the Milwaukee Federal court. The company listed liabilities of \$54,579.26 and assets of \$55,174.80. The assets consist of \$30,000 in real estate, \$23,200 in personal property and \$1,690 in accounts receivable. Of the company's total liabilities, \$51,109.73 are secured.

The Milwaukee Chamber of Commerce Board of Directors has fixed the annual dues for the new year beginning April 7 at \$100 payable in semi-annual installments of \$50 each. The first installment is due on April 7, but if payment is not made within 30 days of that date, the fee is \$55. The second installment is due on October 7 and if this is not paid within the set 30 days, the amount also becomes \$55. Other rules regarding the annual fees of grain membership provide that any member who refuses or neglects to pay the assessment of dues within 10 days shall not be entitled to admission to the exchange room until the assessment shall have been paid. The first installment of the dues also has to be paid before the member is entitled to vote at the annual election of the Chamber of Commerce.

Edward Nordman, the state marketing commissioner of Wisconsin, has announced the inauguration of new grading and inspection work for Wisconsin hay products and additional market news service on hay. The new work was an outgrowth of the hay grades which were suggested not long ago by the Federal Government.

"The Government statistics show that from the standpoint of acreage and monetary value the hay crop is leading all the other crops in Wisconsin," said Mr. Nordman. "The Federal Government Department of Agriculture has established standard grades on Timothy, Timothy and Clover, grass mixtures and other mixed hay. It is the intention of the Wisconsin Department of Marketing to familiarize the growers and shippers of hay in Wisconsin with these grades and if suitable to establish them as the official grades for Wisconsin."

"An inspection service will be inaugurated in the near future and growers and shippers will have to bale their hay properly to have it inspected by a Government licensed inspector who will place a grade upon it and issue of the official certificates. This will be voluntary service with the work done jointly by the state and Federal departments."

Wisconsin is the first state in the nation to inaugurate the Federal-state co-operative inspection of hay, according to Wisconsin market officials. B. B. Jones and two other representatives of the Wisconsin department recently attended a hay school in Washington at which instruction in hay grades was given.

Milwaukee milling output for the past week is given at 3,750 barrels of wheat flour compared with 3,800 barrels for the week previous and 1,700 barrels for the corresponding week of last year. The mills are

approximately twice as active as last year for the same time. Stocks of flour are lower than ever, the total being down from last month, although that date also showed very small supplies. The April 1 figures showed about 10,000 barrels as compared with nearly 14,000 barrels a month ago and 16,000 barrels a year ago.

The Updike Grain Corporation has closed its offices at Milwaukee and sold out its holdings and interests here to the Froedtert Grain & Malting Company. L. J. Keefe, who represented the Updike people in this city, has become associated with the Froedtert grain company.

The Kneisler Bros., who had their business interrupted by the big elevator fire of December 13, are now resuming activities in much larger quarters. The 800,000-bushel elevator which is a part of the Ladish milling property on South Bay Street has been leased by Kneislars. The elevator will be known as the Bay Elevator and has exceptional transportation outlets as it is on both the Chicago, Milwaukee & St. Paul, and the Chicago & Northwestern tracks and it is also accessible to the Pere Marquette and the Grand Trunk Railroad car ferries. The elevator is modern in every respect with cleaning machinery driven by electric power. There are seven elevating legs with a combined elevating capacity of 30,000 bushels an hour, and the unloading capacity is about 30 car loads per day. The elevator also has two track scales each 50 feet long and with a beam capacity of 240,000 pounds, also a shipping hopper scale. A. W. Bosch has been put in charge of the elevator as superintendent and will be in charge of operations.

William George Bruce, well known harbor expert of Milwaukee, who with a commission is in charge of harbor development and rebuilding in Milwaukee, says that each day sees obstacles to the Great Lakes deep waterway removed. He confidently expects that within a very few years, ocean liners will swing into Milwaukee. With Herbert Hoover as chairman of the Federal committee to promote this waterway and to make agreements with the Canadians, Mr. Bruce says it seems an absolute certainty that action will result in this matter very shortly.

Rush work is being done at the various Milwaukee docks these days to get the boats all fitted up in time for navigation which will open very shortly. Many grain boats are being loaded so that they can hurry out to lake as soon as the opening date arrives. In four boats alone almost 1,000,000 bushels of grain have been loaded, including the *M. A. Reeb* with 211,000 bushels of corn, the *W. H. Donner* with 353,000 bushels of corn, the *Yosemite* with 207,000 bushels of corn, and the *Colonel* with about 218,000 bushels of corn. Vessel men say that many more grain ships will be loaded before the opening day for navigation arrives, as the supplies of grain are fairly large. An exceptionally favorable year for Great Lakes grain traffic is predicted by leading grain handlers and vessel men who have been giving the situation attention.

Reports received by Milwaukee grain men indicate that the grain seeding season in Wisconsin will be unusually late this year. Though plowing for oats is usually well along in April and seeding started as a rule, much of the state is still covered with snow. In recent weeks the state was visited by snow storm after snow storm and this piled up rapidly without melting. However, there has been plenty of moisture and except for late seeding, the season is expected to be highly favorable.

Milwaukee millers declare that the price of flour is holding very stable at the present time, price changes being few and far between. They assert that although there was a decline in the wheat futures recently, the choice milling grain is as hard to get as ever and with cash wheat up, no particular decline in flour can be expected.

These millers point out that on Dark Northern wheat now, the difference between the cash and milling price is no less than 17 cents which is probably the wildest margin for months. Cash wheat stays up, they say, no matter how the speculative interests manipulate the futures.

The millers also point out that feed prices are weak and have been going steadily lower; so that more of the costs must be shifted away from feed and over to flour. The demand for feed in Wisconsin has been light as the farmers of the state had large amounts of soft corn last year which had to be used for cattle feed and this has cut down the demand for mill feed. The cut in the tariff on mill feeds is also a very uncertain factor, millers say, and this is also helping to make a weak feed market.

With cash wheat strong and scarce, especially the kinds needed by leading millers to keep up their flour brands, no important decline in flour is looked for this summer, outside of perhaps temporary and slight price changes. Millers also say that fine flour can now be bought in Milwaukee for \$6.85 per barrel, which is only \$1 a barrel above the pre-war price, hence flour is remarkably cheap and has gone up less than other commodities, when compared with figures shown by other pre-war levels.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-Second Year

DULUTH

S. J. SCHULTE - - CORRESPONDENT

A SMALLER tonnage of grain than in several years is expected to be shipped out from Duluth at the opening of navigation. So far less than half a dozen cargoes of all kinds of grain have been chartered to load. Another significant feature is that all the contracts that have been made so far have been for small lots of Spring wheat, Durum wheat, barley and rye to be taken on at the different elevators so that a steamer will find it difficult to obtain a full cargo at one house. Agents of the boat companies have been doing some tall hustling for cargoes, and the result has been so discouraging that many of them are planning to divert their tonnage to the iron ore trade or to book space for loading grain at Fort William for delivery at Buffalo. Space from here for wheat to load for Buffalo delivery at the opening of navigation was booked at the outset at 3½ cents a bushel but the market is now easier and shippers are being offered a 3-cent rate. Present conditions in the cargo market here are accepted as evidence of the slow eastern millers and export inquiry. Stocks of grain in the elevators here now aggregate around 23,000,000 bushels of which wheat, rye and corn account for all but a small proportion. The tonnages of those grains bulk up remarkably even. There are 6,600,000 bushels of wheat; 5,875,000 bushels of corn and 7,800,000 bushels of rye. Another striking feature that is causing comment is that the individual lots of those grains held by the elevator companies do not show much differences in tonnages.

The great bulk of the 4,500,000 bushels of Durum wheat is expected to be ordered out for shipment by eastern elevators and exporters early in the lake shipping season. It is claimed in certain quarters here that milling demand for Durum will absorb within a short time all the supplies remaining in the elevators and in growers hand over Minnesota and North Dakota. Advices received here so far by elevators interests from their correspondents has led them to conclude that the acreage seeded to Durum over the Northwest will be curtailed in relatively greater proportion than in Spring wheat. Farmers are thought to have been influenced by such action by the consideration that the duty of 42 cent a bushel affords them a large measure of protection against imports of Canadian wheat while the duty will not affect the Durum market for the reason that none of that brand of wheat is raised in Canada. They have besides before them the probability that competition of Russian exports of Durum during the coming season may result in cutting down the demand for American Durum from Italian sources. It is expected however that the great majority of Minnesota and North Dakota farmers who have been experimenting in Durum during the last 10 years will stick to that crop for the reason that better productions have been obtained in it over dry areas of the country.

Holdings of the large tonnages of rye in the elevators who are faced with severe losses at its present lineup of quotations are beginning to perk up their ears by reason of the better outlook for a general understanding between France, Germany and England. That it is hoped may lead to Germany being a heavy buyer of rye in this country in the near future. They have visions of quotations being advanced as a result sufficiently to let them out with whole skins. Operations in rye have been a source of disappointment all round this season. Up until recently operators have been ready to trade in it at anytime on the theory that its price was so low that they could not ultimately lose any money in buying it. The bad trading situation in rye for some time back they attribute to announcements from time to time that Russia was supplying that grain to Germany and to the Scandinavian countries.

E. B. McKay, formerly with the White Grain Company here, was a recent visitor on this market. He some time ago entered the grain commission business at Chicago and claimed to have achieved fair success in spite of slow trade conditions during the last several months. "We are all just playing a waiting game and speculative operations are being confined to the narrowest proportions as no spectator is inclined to take on any sizable contracts in futures with the possibility of being called to account by some Government official for overstepping the mark." He mentioned that Stephen H. Jones, a former president of the Duluth Board of Trade, who has been in the commission business in Chicago during the last two years had achieved success.

Members of the Duluth Board of Trade who have been away upon winter vacation trips, are gradually returning and all hands are getting ready to handle any spurt of business that may develop around the opening of navigation. Percy H. Ginder of the Barnes-Ames Company is back from a West Indies trip and

Charles T. Mears of the Itasca Elevator Company and George Barnum, Jr., are back from California trips. H. F. Salyards of the Ely-Salyards Company is away upon an eastern vacation and business trip.

The Consolidated Elevator Company's officials lay claim to having landed its quota receipts during the present dull crop year. To the careful supervision of Herbert Spencer is ascribed the fact that some rocky bits of going have been weathered successfully during a difficult season for all concerned. The Consolidated Elevators are carrying substantial quantities of mixed grains.

F. E. Lindahl, manager of the Cargill Elevator Company, is among the operators who have been steadily on the job all through the past winter. Unlike Mr. Haley, he believes in being in the forefront of the fray whenever there is anything doing. He does his trick in the pit daily and at the same time he keeps close tab upon what his aides are busying themselves with. He has been a persistent bull in the Durum market since early last fall. "Millers will want every bushel of Durum that may be available and they may be expected to come after it strongly from now on. The Durum supplies remaining in the country are light and there will be competition for it between millers and exporters before the harvesting of this year's crop," Mr. Lindahl said recently.

E. N. Bradley, vice-president and general manager of the Globe Elevator Company, is one of the veterans on the trading floor here. He is credited with being a fair mixer in trading circles and also with not overlooking any move that might be of advantage to his company's string of elevators. He has an indefatigable young lieutenant in Cecil C. Blair, the secretary of the company. The pair are credited with having done some effective pioneering in the corn growing districts tributary to this market with the result that the Globe and Peavey houses took their full share of the corn movement while it was on.

Charles F. Haley, manager of A. D. Thomson & Co.'s business on this market, is being given credit for having put over some shrewd market moves during the last few weeks. He bears the reputation of being a veritable sphinx in his method of directing the moves of his corps of lieutenants on the floor headed by H. E. Emerson, James W. Galvin and Bert Dinham. Great Northern Elevator "S.", operated by A. D. Thomson & Co., has fully maintained its reputation for efficiency in the handling of grain during the present season.

W. R. McCarthy who has been the directing head of the Capitol Elevator Company, during the present season, filling the place of the late John F. McCarthy, has been warmly congratulated by his friends in the trade for his acumen in sizing up situations that have arisen from time to time, and deciding upon policies to be pursued in dealing with them. With its new elevator operating efficiently, the Capitol interests have announced that they will be in the running for any business going next fall.

R. N. White, of the White Grain Company, asserted that his house had put through a far better trade during March than had been hoped for in view of the generally dull conditions in the grain handling and feeds and hay trades. He expressed himself as gratified over the results obtained this early in the season. There is every prospect, he thinks, of new opening being developed in the East by specialists in coarse grains on this market as a result of additional facilities that will be afforded for direct shipments by water to points in New York State served by the barge canal by the Diesel motor-propelled boats that have been placed in commission by the McDougall Terminal Company at Duluth.

CINCINNATI

HARRY A. KENNY - - CORRESPONDENT

ADOPTION of resolutions opposing the McNary-Haugen bill and the proposed Federal tax on telegraph and telephone messages, featured a recent meeting of directors of the Cincinnati Grain and Hay Exchange. With reference to the McNary-Haugen bill, the grain and hay merchants contend that it is vicious and paternalistic in principle. In regard to the proposed taxation on telegraph and telephone messages, the directors contend that it would prove detrimental to their business, inasmuch as the bulk of their trading is conducted through these agencies of transportation and that the tax would ultimately place an additional burden on the producers of grain and hay. The Exchange has sent letters to United States Senators Frank B. Willis and Simeon D. Fess of Ohio and Congressmen Nicholas Longworth and A. E. B. Stephens of Hamilton County urging them to use their influence to defeat the enactment of the proposals. Congressman Stephens has



SLOGAN FOR THE NATIONAL CONVENTION

informed the Exchange that he would oppose the McNary-Haugen bill. In reply to Congressman Stephens, the following letter was sent on March 15 by D. J. Schuh, executive secretary of the Grain and Hay Exchange.

March 15, 1924.
Please accept our thanks for your letter of March 13, 1924, relative to the McNary-Haugen bill.

From press dispatches yesterday, and in a letter received from Senator Simeon D. Fess, we note, with alarm, that this measure will receive strong support in the Senate.

We believe that the far-reaching effect of such legislation removes us from entertaining what may be termed purely selfish views when we ask for your support in opposition to the measure.

There exists no question that for the present wheat and other grains will be the first agricultural products to suffer from the working of such a law should it be enacted.

The operation of the proposed law in the handling of the products in which we are directly interested would give sufficient cause for disastrous consequences in our foreign relations.

You can appreciate the tremendous effect the disposal of our surplus agricultural products in foreign markets will have in influencing other nations to adopt retaliatory measures.

The McNary-Haugen bill would keep out of this country foreign agricultural products and at the same time make a "dumping ground" of foreign countries. It can not work! We, as a nation can not afford to take chances on bringing about the serious consequences which will surely follow such a frenzied attempt to give the producer more money for his products than the customer or consumer is willing to pay.

Supply and demand must govern. Every citizen is interested in this phase. We must not further excite an already considerably disturbed international situation.

Surely if the control of grains presents such unfortunate results, what may we expect when the provisions of the law are applied to meat (all cattle products) cotton, wool, etc?

Aside from the international situation, and assuming that in presenting that angle we are a bit unduly apprehensive every citizen of this country is concerned in being required to pay more for flour, bread, wheat, wool, cotton and all their products and by-products, than supply of these necessities dictate should be exacted.

I note that Mr. Haugen hails from the State of Iowa, Iowa lays claim to being the richest state in the Union. 560,000 automobiles—one to every five inhabitants—1,200,000 bank accounts; that the farms of Iowa produce agricultural wealth in excess of \$90,000,000.

It is amazing, in my opinion, that the representative of people possessing such wealth should propose a measure of this type. Their wealth was accumulated under a system of government that permitted the free employment of initiative. This bill would destroy that price-less right and plunge this nation into the worst forms of communism and socialism.

Can such a measure be sound in any part? Can such a measure be amended to bring about the desire of its framers and advocates without inflicting the harm that will surely follow the principle embodied in it? We say that the proposed law in whole or in part is unsound and unnatural.

We again urge you to oppose this bill.

Figures on grain and hay receipts at the Cincinnati market showed a larger increase than expected for the month of March. The receipts of grain showed an increase of 57 cars as compared with the corresponding month of last year. One hundred and sixty more cars of hay and 19 more cars of feed were received than in March 1923. Receipts for the first quarter of 1924, show a substantial increase over the same period of last year. Receipts of wheat showed an increase of 141 cars, shell corn 424 cars, oats 12 cars, feed 50 cars and hay 33 cars, while there was a decrease in rye and barley of 13 cars, making a net increase for the first quarter of 652 cars, as compare with the corresponding period of last year.

With a face ruddy and unwrinkled as a man half of his years, John W. Fisher, the oldest member of the Cincinnati grain trade celebrated his ninety-fifth birthday last month. He also is the oldest member of the Chamber of Commerce, having joined that organization in 1858. Mr. Fisher made the contract with General W. T. Sherman for the fodder and provisions for the "march to the sea." Despite his advanced age, Mr. Fisher still takes an interest in the hay and grain business of J. W. Fisher & Co., 120 East Water Street, which he established 72 years ago.

Dissolution of the Ralph Gray & Co., grain and hay concern with offices in the Neave Building was accomplished last month. Ralph Gray, owner of the business, discontinued it because of his health and has gone to Virginia for an extended rest. Charles B. Hill, who assisted Mr. Gray in the business, has formed a partnership with Frank R. Maguire in the grain and hay shipping and receiving business and have established offices in the Thomas Building.

The slogan, "C. U. in Cincy," has been adopted by the Cincinnati Grain and Hay Exchange for the annual convention of the National Grain Dealers Asso-

ciation, which will be held in this city, next fall. The slogan has been adopted by the national association and will be used in the form of stickers on all mail matter sent out by its members. The local committee of which F. L. Watkins is general chairman is progressing nicely with arrangements for the meeting. The banquet will be held in the evening of the second day of the convention. D. J. Schuh, executive secretary of the local exchange, has been informed by Charles Quinn, secretary of the national association, that Dr. G. W. Dyer of Vanderbilt University, Nashville, Tenn., has been engaged to address the convention.

Thomas J. O'Neill, widely known and connected with the Early & Daniel Company, is exalted ruler of the Cincinnati Lodge of Elks. He was unanimously elected recently. His election is regarded as a recognition of his efforts in the drive for the new Elks' Temple, which was completed in time to receive him as exalted ruler.

H. E. Richter of the Richter Grain Company has been elected president of the College Hill Business Men's Club.

ST. LOUIS

W. F. WALTER

CORRESPONDENT

THE PAST month in the wheat market again reflects an unsatisfactory state of affairs. Primary receipts were light although shipments were of good quality milling varieties which were readily absorbed by local and outside mills.

Flour milling has been far below normal and if any improvement should develop there will be a dearth in the supply of good milling wheat, which will naturally affect values. However, no such improvement is being looked for under present conditions.

Cash wheat maintained a fairly level basis with but little fluctuation, although the future market experienced a decided decline due to stocks in all terminal markets awaiting delivery on sales of futures. These stocks, however, are not of Soft wheat milling grade. Local stocks of good Soft wheat milling grade are extremely light and it is not known how much more good milling wheat is available during the crop.

Reports are in circulation that central and southern Illinois growing wheat has been hurt by the open winter and many fields were observed where the plant has failed to respond to the warm weather.

Corn stocks showed a decrease during the past 30 days, while receipts were light and a good demand prevailed. With the premium on No. 3 Yellow advancing, an increased movement was noted which overshadowed the existing demand. The quality of receipts were poor, running with yellow predominating and grading No. 4 to sample. Country advices report seed corn situation worst ever known, with cribbed corn unfit for seeding and the very best showing weak germination tests on account of early frost and dampness.

The oats loom up as the best of the three most important grains, offerings being of good grade with receipts about equal to the demand, and a firm market ruled during the last 30 days.

There was a decided increase in receipts of hay during the past 30 days, with quality being held up fairly well and values maintaining a steady level. Damp cold weather and the late spring has forced increased feeding which has resulted in all offerings being readily absorbed.

Very little straw was received but a ready market absorbed all offerings.

Millfeeds continued draggy and although mills were running short time, values declined considerably only to react on the first indication of renewed interest. Spring wheat feeds were selling in this market toward the end at a discount of from \$1 to \$2 per ton under Winter wheat feeds and some trading resulted, but buying was not of a general nature.

The Board of Directors of the Exchange announce the intention of publishing an Exchange magazine and have posted a notice on the bulletin board that a prize will be given for the most appropriate name. The contest is for members only and closed March 31, 1924. Winning title has not been decided upon.

Gervais Gaievnie, flour and grain broker of New Orleans, La., was in St. Louis on business recently.

George G. Keith of Arcady Farms Milling Company, East St. Louis, Ill., is an applicant for Exchange membership having surrendered certificate of George C. Sackman.

George Powell of Powell & O'Rourke Grain Company, J. O. Ballard, of Ballard Messmore Grain Company, and Roper Annan, of Annan-Burg Grain & Milling Company, represented the Merchants Exchange at the meeting of the General Legislature Committee of Grain Exchanges of the United States, held in Chicago recently. Roger Annan later left for Washington, D. C., as Exchange representative and member of the above Committee to fight the enactment of the McNary-

Haugen bill. In the same connection the St. Louis Clearing House Association of Bankers have forwarded a resolution in opposition to the bill in which some very good reasoning was set forth as to why this bill should be defeated.

Eugene Smith, secretary of the St. Louis Merchants Exchange, is at home suffering from a severe attack of double pneumonia. The attending physicians pronounced his condition as very grave.

J. W. Cohn of National Feed Company, of this city, accompanied by his wife leaves St. Louis April 12 for New York, where he will embark on the Steamer *Colombo* sailing April 16, for Naples, Italy. A three months' tour of Europe has been arranged.

I. Van Den Bergh of N. V. Hebrs. Van Den Bergh Flour Importers, Rotterdam, Holland, visited St. Louis last week. He is visiting the principal flour markets in America.

The many friends of Irving Schwartz, of Schwartz Bros. Feed Company, of this city, offered their sympathies on the death of his son Irving, Jr., who died Sunday, March 23, 1924, at the age of six, from a complication of the heart following an attack of diphtheria.

Chas. Rippin, traffic commissioner of the Merchants Exchange, has issued the following bulletin:

The Barge Line has published a tariff taking effect March 27, which has just been received in this office, authorizing a 11½ cent rate on bulk grain from St. Louis to New Orleans for export, to be applied on grain which is taken out of the elevators at New Orleans and reshipped coastwise by steamer via Gulf & Southern Steamship Company, to Miami and Tampa, Fla., or re-shipped by railroad from New Orleans to destinations in Mississippi and Louisiana on the following lines of railroad:

I. C. in Louisiana and Mississippi; Alabama & Vicksburg in Mississippi; Gulf & Ship Island in Mississippi; Gulf, Mobile & Northern in Mississippi; L. & N. in Louisiana; L. R. & N. in Louisiana; Mississippi Central in Mississippi; N. L. & T. R. R. & S. S. Company in Louisiana; New Orleans & Northeastern in Louisiana and Mississippi; New Orleans Great Northern in Mississippi and Louisiana; New Orleans, Texas & Mexico in Louisiana; Texas & Pacific in Louisiana; Y. & M. V. in Louisiana and Mississippi.

To some stations there are certain arbitrariness to be added in order to make the through rates, and any shipper figuring on a through rate basis should inquire as to these arbitrariness before making his calculations. This tariff really amounts to a transit privilege at New Orleans on reshipments as described above.

In order to secure this rate for the haul from St. Louis to New Orleans, all-water, it is necessary to surrender to the Barge Line at New Orleans inbound freight bills and outbound records of shipment. Freight Tariff No. 89, effective March 27, covers.

Notice has been posted by the secretary of this Exchange, that Membership Certificate No. 9131—dated January 12, 1909, issued in the name of James R. Campbell, has been lost or destroyed and application for duplicate has been filed.

Max Kennedy, of Kennedy Grain Company, of this city, who was struck by an automobile and badly injured about 60 days ago, is again at his office.

J. A. Daugherty, flour, feed, and grain broker of Nashville, Tenn., was a visitor in St. Louis recently.

Ed. Schultz, of Schultz Baujan & Co., millers and grain dealers of Beardstown, Ill., was recently injured when a runaway horse jumped into his automobile. He has since fully recuperated.

The United States Circuit Court of Appeals yesterday affirmed a judgment of \$45,000 which John F. Schlafly, trustee for the bankrupt Temtor Corn & Fruit Products Company, was granted from the Mercantile Trust Company in 1921. Schlafly sued to recover on the grounds that the money, which was an installment on a \$1,500,000 bond issue floated by the Mercantile Bank for the company, was paid within four months prior to the company going into bankruptcy, and under the bankruptcy act should be turned over to creditors.

The following were visitors on the Exchange last month: W. N. Adams, of Arkadelphia Milling Company, Arkadelphia, Ark.; Ludwig Eiseman, of K. & E. Neumond, Inc., New Orleans, La.; A. P. Hahn, of Carlyle Milling Company, Carlyle, Ill.; J. M. Cook, of E. G. L. Milling Company of Helena, Ark.; R. E. Hillier, of Penick & Ford Company, Cedar Rapids, Iowa; L. E. Smith and F. E. Martin, of Valley City Milling Company, Grand Rapids, Mich.; T. Blish, of Blish Milling Company, Seymour, Ind.; E. M. Ford, of Milford Mills, Milford, Neb.; Chas. Roose, vice-president of Hunter Milling Company, Wellington, Kan.; A. P. Husband, secretary of the Millers National Federation, Chicago, Ill.; J. M. Rauch, of McKenzie Milling Company, McKenzie, Tenn.; Edgar Evans, of Acme Evans Milling Company, Indianapolis, Ind.; R. C. Mead, sales-manager, Sunray Products Company, Kansas City, Mo.

The Mississippi Warrior Service have inaugurated packet service with the departure of the steamboat *Birmingham* from New Orleans with a cargo of coffee on March 29. The barge arrived in St. Louis on April 8. The first barge from St. Louis left April 4 with a cargo of shoes and general merchandise which made stops at Cairo, Memphis, Vicksburg with freight for interior points in Arkansas, Mississippi, and Louisiana. Three self propelled barges built in St. Louis three

years ago for river service—the *Gulfport*, the *Birmingham* and the *Mobile*, will be operated in the new packet line. Sailings will be weekly with Saturday as the departure for the upstream trip and Friday departures from St. Louis. The upstream trip taking 10 days and the downstream trip five days.

Roy Atwood, of R. P. Atwood & Co., hay and grain merchants of this city, announced his candidacy and was elected mayor of Clayton, Mo., county seat of St. Louis County, wherein he resides.

H. Vest Lancaster, doing business as Lancaster Commission Company with offices in the Merchants Exchange, St. Louis, filed voluntary petition in bankruptcy on March 31, 1924 in the United States Circuit Court in this city. His assets are listed as \$335; liabilities, \$12,180.16; unsecured claims, \$12,160.29.

The St. Louis Millers Club held its annual meeting in the dining room of the Missouri Athletic Association, here on Tuesday, March 25, 1924. A dinner was served and members immensely enjoyed the entertainment which followed. A series of interesting speeches which were well received—A. P. Husband, secretary of the Millers National Federation, outlined what the Federation had done to combat unfavorable legislation to millers, during the past year. Chas. Roos, vice president of Hunter Milling Company, of Wellington, Kan., and president of the Millers National Federation, spoke on the existing conditions on the milling industry. T. Blish of Blish Milling Company, Seymour, Ind., the coming president of the Federation, solicited the support of the local millers during his coming administration. C. C. Hildebrand, of the widely known international law firm of Marvin & Pleasants, used as a subject for his talk—"The Problem of the Miller in Exporting from a Legal Standpoint."

Roger Annan of Annan Burg Grain & Milling Company, of St. Louis, spoke on the destructiveness of the McNary-Haugen bill and Chas. Espenchied, former president of the Federation, spoke on legislation unfavorable to the miller and the remedy. A general discussion then followed on the McNary-Haugen and the Jones bills, also the recent changes in the tariff on grain, flour and feed. H. G. Craft, of Bernet Craft & Kauffmann Milling Company, of this city, was elected president of the Club for the coming year. He, by the way, celebrated the 79th anniversary of his birth on the same day. Al. V. Imbs, of the J. F. Imbs Milling Company, of St. Louis, was elected vice president, and Frank Eichler was re-elected secretary and treasurer.

E. L. Stancliffe, general manager of Geo. P. Plant Milling Company, and J. D. Schmitz of Meyer Milling Company, were admitted to the membership of the Club.

The Flour Inspection Department of the Exchange report 30,234 barrels inspected during March. Flour stocks on April 1, 1924, amounted to 84,600 barrels, on March 1, 1924, 94,300 barrels, as against 89,100 barrels on April 1, 1923.

The St. Louis Grain Club held a meeting and dinner at the Forest Park Hotel in this city on Tuesday, April 1. It was an appropriate day for the initiation of new members who were subject to many amusing embarrassments. The new members admitted were: Ralph Taylor, of Taylor & Gattion Grain Company; John D. Mullally, Graham & Martin Grain Company; John Hawkins, Hunter-Robinson Milling Company; Frank Waddock and Joe Waddock of O'Connor Market Reporter; Charles Barron, U. S. Government; W. L. Malkemus, Kellogg Huff Commission Company; E. G. Marsh, Missouri State Grain Inspection; J. J. Gilmartin, Missouri State Grain Inspector; Henry Foell, Foell & Co.; Marshall Lusk, Lusk Commission Company; Robert Chamberlain, F. B. Chamberlain & Company.

Fred Lake of Hall Baker Grain Company, Kansas City, Mo., was a visitor on the Exchange floor recently.

W. K. Kellogg, of the Delmar Company, Minneapolis, Minn., was a recent visitor in St. Louis.

The St. Louis Merchants Exchange will move its clock ahead one hour beginning Monday, April 28, to conform with the daylight saving plan of the Chicago Board of Trade.

Harry Halliday of H. L. Halliday Company, grain merchants of Cairo, Ill., was on the Exchange recently.

The bond of Lem Motlow, who is charged with the murder of a Pullman car conductor, was signed by Thomas E. Price, John H. Watson, Cary H. Bacon, Joseph A. Foerstel, A. C. Petri, J. M. Fuller, J. B. Horton and Jacob Schreiner, all being prominent grain merchants and members of the Exchange. Motlow is well known in grain and milling circles.

Jacob J. Koenigsmark, 65 years old, a very prominent Waterloo, Ill., miller for 50 years, who died March 30, 1924, was buried in the family plot in Waterloo Cemetery. Fifty years ago, his father, the

late Thomas K. Koenigsmark, founded the Koenigsmark Mill in Waterloo. Since that time Koenigsmark has been intimately connected not only with that mill but also the Schoening-Koenigsmark Milling Company, at Valmeyer and Prairie Du Rocher, Ill., which three mills are now known as the Monroe Milling Company's property. He was a member of the Southern Illinois Millers Association, his mill having a strong southern Illinois trade and for 29 years vice-president of the State Bank of Waterloo.

BUFFALO

ELMER M. HILL CORRESPONDENT

JAMES C. SCOTT, a member of the Royal Grain Enquiry Commission, which was recently in Buffalo inspecting grain handling facilities at this port with a view of determining, if possible, whether the best grades of Canadian wheat is being mixed with lower grades of American wheat at terminal elevators at either Buffalo or New York for export, has recommended to the Canadian Government and wheat growers in the Canadian Northwest the use of an all-Canadian route for grain exports. This would prevent the annual diversion of more than one-half of the business to the Buffalo-New York City route. Commissioner Scott suggested that rates for grain shipments on the Canadian National Railroad, the Government-owned rail transportation system, should be lowered sufficiently to prevent shipment of grain through Buffalo. Routes for shipment also would be arranged, Mr. Scott says, so that all Canadian grain traffic might be handled by Canadian railroads and Great Lakes steamships lines via the Welland Canal to Montreal. While in Buffalo, Commissioner Scott and other members of the Royal Grain Enquiry Board, were guests of the grain handling interests of the port. Mr. Scott at that time charged that somewhere enroute between the terminal elevators at Fort William and Port Arthur and the time the Canadian grain is loaded into ocean bottoms at New York, high grades of Hard Canadian wheat are mixed with low grades of American wheat so that when it arrives in the Liverpool market the grain is of a lower standard than when it was shipped by growers in the Canadian Northwest. Grain shipped via the Canadian Pacific coast ports to England through the Panama Canal are not lowered in grade before it reaches English receivers, he said. No report has yet been made by the Commission on the charges of mixing in the United States.

Of the 11,500,000 which will be spent on Canadian Government work in the Niagara district this year, \$425,000 will be used for the completion of a 1,000,000-bushel addition to the Government-owned grain elevator at Port Colborne, Ont., and \$11,000 for harbor improvements in the vicinity of the elevator. Construction of the Port Colborne Elevator was started last year and \$350,000 was then provided for the work. This year's estimate is \$75,000 increase over a year ago. The 1,000,000-bushel addition will be of concrete construction similar in all respects to the first unit of the elevator and will materially increase the grain storage facilities of the lower Lake Canadian port.

It is apparent to up state and elevator interests that the bill before the New York State legislature providing for an appropriation for the construction of a state-owned grain elevator at the port of North Tonawanda at the western terminal of the New York State Barge Canal, is a dead issue. It is reported the opposition to the measure from the State Department of Public Works is too great to permit its being passed at this session of the legislature. Grain interests, however, will continue their fight to have a state owned elevator at the western terminal of the state waterway. The Chamber of Commerce of Tonawanda and North Tonawanda will continue their campaign for the enactment of a similar measure at the next session of the legislature, if the present bill is killed.

The Great Lakes freight market in all lines has been somewhat quiet since the early days of the month despite the fact that the lake is rapidly being cleared of ice and boats soon will start out on their first trips. Grain tonnage for opening shipment was offered in the Lake Superior trade at 3½ cents to Buffalo, but shippers are not in the market for capacity at that figure. About a month ago shippers were bidding 3½ cents but no tonnage was available at this figure. The vessel owners failed to obtain a higher rate and then came down to the figure offered by shippers only to have the latter again offer a lower rate. Spot boats on the market at Duluth at four cents for Buffalo were not placed. Shippers have been slow in bidding for tonnage but it is generally believed that an offer of 3¼ cents would bring out many boats. Three steamers under charter at Duluth will be shifted to elevators as soon as ice conditions become more favorable. Sales of grain are

very small and there will not be much change of the Great Lakes freight market until orders come in more freely. The work of unloading storage boats is progressing rapidly and, according to present indications, the majority of the ports will be in good condition prior to the opening of the season. Conditions at the elevators at the Canadian Head of the Lakes are not very favorable. During the week ending April 6, an increase of approximately 850,000 bushels was made in stocks. Fort William and Port Arthur have about 63,000,000 bushels in store, including 3,500,000 bushels afloat in vessels in the two harbors. The rail movement is light all around and only a limited amount of wheat was sent forward during the first week of April. Stocks of grain at the Canadian Head of the Lakes are much larger than they were a year ago at this time and boats will have to report for cargoes rapidly or the elevators will be congested when the spring crop is ready.

Recently complaints anent hay quotations reported by the New York State Department of Farms and Markets have been received at Buffalo from towns in western New York. Complaints said prices quoted for Timothy have been about \$6 or \$7 too low, saying that hay in their own local markets costs from \$27 to \$28. On the New York market prices were about \$10 higher than Buffalo quotations. In a statement by Richard Doersam, inspector of the state office at Buffalo, he said prices quoted by the bureau are correct and added:

"The Buffalo quotations are the result of daily observation and diligent inquiry into actual conditions in the Buffalo market, among both buyers and sellers. There has been a great supply of hay brought into the Buffalo market daily. The demand has not been as great as the supply would warrant, as most of the hay users in rural communities have contracted for supplies, and, therefore, the prices are lower than in towns 60 miles away. There is always enough hay near Buffalo to keep the price at a reasonable minimum."

Daniel T. Ryan, well known in Buffalo transportation circles as a grain and flour salvage expert, is dead. He had been ill for some time and was 61 years old. Mr. Ryan had offices in the Prudential Building. In addition to his grain salvaging business, he was Buffalo manager for Matthews & Co., of Binghamton, N. Y., flour merchants. For several years he handled flour and other grain products for the Erie and Lehigh Valley Railroads and prior to that he was salvaging agent for the Mutual Transit Company. He was a member of the Buffalo Flour Club and the Chamber of Commerce. Besides his widow, Mr. Ryan is survived by three sisters.

The Eastern Steamship Company, Ltd., a subsidiary of the Eastern Grain, Mill & Elevator Corporation of Buffalo, which operates a fleet of grain carriers between Buffalo and Montreal via the Welland Ship Canal, has appointed masters and engineers to serve on the board of the grain fleet during the season which is just getting under way. It was announced that the steamer *Clement*, the newest addition to the fleet, has been launched at Cowes, England, and was scheduled to sail from Liverpool about April 10 for the Canadian Soo. She then will enter the Great Lakes grain carrying trade.

Members of the firm of Boland & Cornelius, vessel agents and operators of the fleet of grain carriers for the Eastern Grain, Mill & Elevator Corporation of Buffalo, have returned from a winter vacation in the Sunny South. John J. Boland accompanied by Charles H. Williamson of the Williamson Forwarding Company, grain handlers, went to Pinehurst, N. C., while Adam E. Cornelius, Mrs. Cornelius, Mr. and Mrs. M. A. Reeb, Mr. and Mrs. Eugene Zacher and Mr. and Mrs. George Laub went to Florence Villa, Fla. Some close games of golf on southern greens were reported upon the return of the two parties.

An early morning fire at the plant of the Clover Leaf Milling Company, on the Military Road, Buffalo, did \$10,000 damage to the feed plant. The cause of the fire was not determined. The blaze smoldered in the grain for several days before it was finally extinguished.

Governor Alfred E. Smith of New York has signed orders dissolving the charters of these Buffalo companies engaged in the grain, elevator and milling industries for their alleged failure to file reports with the state department as required under the stock corporation law: American Seed Company, Atlas Milling Company, Buffalo Floating Elevator Company, Buffalo Forwarding Company, Buffalo Grain Cleaning Company, Buffalo Grain & Provision Exchange, Buffalo Mey Grain Drying Company, Central Dock & Terminal Company, Central Elevating Company, Commercial Elevating Company, Dart Elevating Company, Dart Elevating & Transfer Company, Eastern Elevator Company, Hager Perfect Grain Door Company, Husted Milling & Elevator Company, International Elevating Company, International Grain & Stock Exchange, Ltd., Kellogg & McDougal Linseed Oil Company, Lake Shore Elevating Company, Marine Grain Drying Company, National Bean Flour Company, National Grain Drying Company, Niagara Ele-

vating Company, Paragon Milling Company, Queen City Milling Company, Queen City Paper & Flour Sack Company, Sturges Elevating Company, Sutton Grain Dryer Company, Taylor Grain Company, Tift Fire Proof Elevator Company, Ultimotor Gluten Flour Company, Union Portable Grist Mill Company.

H. E. Babcock, newly elected member of the New York State Council of Farms and Markets, has sent a communication to Berne A. Pyke, commissioner of agriculture and Secretary Wallace urging them to take immediate action to prevent wholesale fraud in the sale of certain Clover seed. It was charged by Mr. Babcock that New York State farmers are being subjected to unnecessary risks through the inadvertent use of imported Clover seeds which tests made by the New York State College of Agriculture at Ithaca, N. C., prove will winterkill under New York state conditions. Mr. Babcock in his letter says:

"Close to 20,000,000 pounds of Clover seed has been imported from Europe. Practically all of this seed will not live under New York state conditions. Yet despite the large importation and the admitted fact there is a great scarcity of domestic northern grown seed it is impossible to find any stocks of seed offered farmers which are admitted to be imported seed or blends of imported and native seed."

Mr. Babcock claims to have evidence of the blending of imported seed in seed which is being offered farmers as strictly northern-grown, and he bases his request for official Government action upon this evidence.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS with the Louisville hay, grain and elevator trade has been picking up just a little, and the general outlook is considered good, as to movement of hay and grain. However, storage stocks are light, as is usual for this season of the year, with the result that elevators handling public business are not showing much in the way of rental incomes just now.

Another elevator fire on the evening of April 4, destroyed the old Fleischmann malt house elevator on Thirteenth and Maple Streets, owned and operated by Early & Daniels, of Cincinnati, resulting in a considerable loss of which approximately one half was on grain in storage. The building and contents represented a total loss. The building was sold two years or so ago to Winchester, Ky., interests, and later sold to the Cincinnati people who had been planning extensive enlargement, and installation of additional equipment.

Loss of the Fleischman elevator means further reduction in storage capacity in Louisville. During the past few years there have been three complete losses in elevator fires, this list including the Verhoeff plant, and the Kentucky Public Elevator Company's old plant. The latter was replaced with a first class concrete and steel building, and fine machinery and equipment. The Verhoeff plant was not rebuilt, and the company arranged to handle through the Kentucky. There is no indication at this time that Early & Daniel will go to the expense of erecting a new plant.

The Bingham-Hewett Grain Company, reported that there were a lot of little orders rolling in now for sacked stuff, in mixed cars, taking 500 or so of corn, and 1,000 or thereabouts of oats.

The Kentucky Public Elevator Company, Louisville, reports that business has slumped off somewhat over the month, although daily handlings are around 10 to 12 cars in and out. Drying business is quite light, while grain on storage today consists of 115,000 bushels of corn, 66,000 of wheat and 7,000 of oats, being the lightest holdings of some months, as big holdings of wheat have been moved to owning mills.

News was recently received from Jacksonville, Fla., of an emergency operation there on S. Thurston Ballard, president of the Ballard & Ballard Company, Louisville, who was taken ill with appendicitis while spending the winter at his winter home in Eau Gallie, Fla. Mr. Ballard was rushed to Jacksonville and operated upon, and his condition at that time was so critical that members of his family in Louisville were called to Florida. However, he is now doing well, and is believed to be out of danger.

Propaganda put out by agricultural agents, etc., against southern European Clover seed over the winter, not only killed sale of Clover of the imported variety, but also domestic Clover due to the fact that farmers were afraid it would be mixed, and considering the high prices of Clover of any variety, decided not to plant it. U. S. Agricultural reports show over 21,000,000 pounds of Clover imported this year. Four years ago a total of 14,000,000 pounds was imported, and that year showed the biggest pro-

duction of Clover in the history of the country, which would clearly indicate that this country can successfully grow imported seed. This year with a tremendous importation of foreign seed to fill out the short domestic stocks, prices of Clover broke, especially imported, but the propaganda against southern European Clover has extended to all Clover, with indications that seedsmen will carry over a lot of Clover, and that there will be a very short crop of Clover hay. Some of the local Clover seed handlers have even offered it on consignment at market prices in order to move it.

There has been very fair movement this spring on seed oats, some of the local handlers being busy in sacking out oats. This is due in part to short acreage of wheat in the fall, along with considerable damage done to wheat, rye, and small grains by severe cold with lack of snow protection over the winter. It is claimed that orchard grass, Red Top, Clover and other fields suffered severely.

The spring race meet starts in Louisville on May 10, and the fiftieth Kentucky derby will be run on May 17. Already the city is filling up with racers, the stables at Churchill Downs and at Douglas Park being fairly well filled up with horses that are wintering or training here, which means that the hay and grain concerns that handle race track business are fairly busy.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

MEMBERS of the Produce Exchange and especially those engaged in the grain trade were greatly pained and shocked late in March to hear that their esteemed friend and associate Edwin A. Weed had passed away suddenly on Sunday, March 23. His sudden and untimely death—he was only 49 years of age—was ascribed primarily to heart trouble. He had been attending to business as usual and was on 'Change as customary on the Saturday previous. On Sunday he had been putting around in his garden at his residence in Westfield, N. J., then taking his wife and daughter out for an automobile ride and immediately after his return he complained of severe pains in his stomach and before any effective help could be afforded his heart ceased to function.

Mr. Weed had many warm friends in the trade not only here but in Chicago and elsewhere as he had long been actively engaged having begun when a mere youth with the late Edward Annan who was then conducting the Erie Grain Elevator afterwards he went with the old grain house of H. O. Armour & Company. Subsequently he went with the Nye & Jenks Grain Company, where he remained about 15 years. When this company went out of the export business here and closed their offices he went with the Grain Growers Export Company, Inc., he then went with the Cargill Grain Company, when it succeeded the Taylor & Bournique Company, but when the Uhlman Grain Company opened a branch here he became manager. Mr. Weed's death caused sincere sorrow among grain men generally as he was greatly esteemed and respected for his kind and friendly nature and upright character.

James Norris of the Norris Grain Company, of New York and Chicago, was welcomed back on 'Change by his numerous friends after an absence of about four months which was spent largely in the West but particularly in Chicago.

Thomas M. Blake, head of Blake, Dobbs & Co., grain receivers and exporters, was warmly welcomed back on 'Change this month looking much improved by his five-week absence which he spent mainly in Florida and Cuba. He expressed himself as much gratified by the indications of general betterment in Cuba. He found there had been a decided increase in building operations and a general uplift in political and economic affairs.

B. F. Schwartz of B. F. Schwartz & Co., receivers of grain, feed, etc., was welcomed back on 'Change lately looking much benefited by his two and one half months' trip via the Mediterranean visiting Paris, Antwerp, Rotterdam and London. Although he visited the firm's correspondents in those markets he paid little or no attention to business matters having gone almost wholly for rest and recreation.

Members of the New York Produce Exchange and notably those in the flour, feed and grain trade were sorry to hear of the passing away of their former associate, Jacob C. Ott, at the advanced age of 83 years. For approximately 50 years Mr. Ott was an active and prominent character in the trade in the West as well as here. More than 40 years ago he came here and almost immediately was struck by the advantages

offered in Staten Island as an excellent location for a mill. He took an active part in the construction and operation of the Staten Island mill which was afterwards absorbed when the organization of the Hecker-Jones-Jewell Milling Company, was consummated. Because of his age Mr. Ott retired from active business about 70 years ago on a pension.

John Melady, head of the Melady Grain Company, received a hearty welcome from his many friends in the grain trade on the New York Produce Exchange on his return from a nine-week trip abroad largely over the Mediterranean route as far as Constantinople but his trip had to be curtailed because he was called back by cable owing to the fact that his son was laid up with pneumonia. He was much relieved to find that his boy was much improved. During his visit he found ample supplies of flour generally and much depression on all sides. Nevertheless he was led to look for smaller exports of wheat from Russia having been told that the surplus there was about exhausted.

William H. Mitchill who is a prominent member of the export department of the Hecker-Jones-Jewell Milling Company, received a hearty welcome and congratulations on his improved appearance after a two months' trip to tropical markets where he found business satisfactory.

E. S. Westbrook, vice-president of the Bartlett Frazier Company, was a visitor in the local market late last month. Other visitors included W. C. Bliss, a grain broker with James E. Bennett & Co., in the Chicago market; Charles Sincere and Benjamin Sincere of the firm of Charles Sincere & Co., grain, provision and stock brokers of the Chicago Board of Trade; A. M. Adams, well known grain trader on the Chicago Board of Trade; M. L. Vehon of M. L. Vehon & Co., members of the Chicago grain and seed trade. Henry J. Patten, member of Bartlett Frazier Company, of Chicago.

As a result of the sudden and untimely death of Edwin A. Weed who represented the Uhlman Grain Company, of Chicago on the New York Produce Exchange, James W. Bingham familiarly called "Jim" by his host of friends in the trade has taken the place left vacant by Mr. Weed. Mr. Bingham has been well known in the grain trade here and abroad for many years having been prominent in the export line in early life when he represented the old and prominent export house of William Bingham & Company, of Liverpool. He is a nephew of the late and highly esteemed David Bingham, who was once a power in the export trade when he was head of Bingham Bros., and also a nephew of "Uncle Alec" Bingham who recently retired as head of William Bingham & Co., at the age of 85 years.

Members of the flour and grain trade not only in this market but in western markets were pained to hear that their old friend and associate Philetus Smith, has passed away in his 85th year. After 50 years in domestic and export flour business in New York.

Notwithstanding his age Mr. Smith had been in excellent health until about a year ago but in February, 1923, he had a bad heart attack and while he recovered from it, his general health gradually failed. When a mere youth he went to sea with his uncles who were sea captains and became a mate at the age of 19. His first position in the flour trade was with Partridge, Wells & Co., commission merchants. When this firm dissolved in 1878 he was taken into partnership with Mr. Partridge under the firm name of Partridge & Smith. When Mr. Partridge died in 1884, Mr. Smith continued the business on his own account under the style of Philetus Smith, Jr. Mr. Smith was a stockholder in the Sparks Milling Company, Alton, Ill., and had been associated with the Sparks for 50 years. He also represented the Crookston Milling Company, Crookston, Minn., and the Enns Milling Company, Inman, Kan. His two sons, Clarence H. and Harold M., entered business about 20 years ago, but the youngest son, Harold, died in June, 1919. In November, 1918, Mr. Smith's wife was stricken with a rheumatic infection and his left business immediately and for five years he devoted himself entirely to caring for her. In January, 1920, Mr. Smith officially retired from business which he turned over to his son, Clarence H. Smith, who will continue the business under the name of Philetus Smith.

Julius Issac, president of the Continental Grain Company, was welcomed back on 'Change early this month and congratulated on his improved appearance after a two and one-half months' trip to Europe which he spent largely in Italy and France. In his judgment conditions generally in the various markets he visited appeared more encouraging.

Dwight K. Yerxa who was for years prominent in the flour trade in Minneapolis, but who about two years ago became actively connected with the Pillsbury Flour Mills Company, in Minneapolis was chatting with friends on the New York Produce Exchange early in April. Mr. Yerxa came to Buffalo late last summer and became general manager of the mill there

recently erected by the Pillsbury company. In addition to managing all business in the Buffalo territory Mr. Yerxa said that all the management of all eastern agencies were now centered also in Buffalo. Mr. Yerxa participated in the trip of the New England Bakers Association to Bermuda recently and asserted that it was successful and highly interesting.

It was stated in the local flour trade that many western millers had become so anxious to market their surplus stocks which had been accumulating too rapidly had become reckless and in their anxiety to make sales promptly had displayed decidedly poor judgment, selling direct to unknown or irresponsible buyers and, to make matters worse, at unreasonably low prices. Many of the millers got "stung" as the buyers either were unable to pay or else laid down on their contracts partly because they imagined they could buy even cheaper elsewhere. Old and sagacious members of the trade have realized that it was dangerous to sell flour or any other commodity to people that are either unknown or not worthy of trust. Obviously such a course is particularly reckless or risky when prices are declining as they did in the recent past.

Lately the information was made public in a regular way to the effect that the flour business long conducted in this market under the firm name of George A. Zabriski will be taken over May 1 by the Pillsbury Flour Mills and operated as a branch office but with no change in the personnel.

Members of the flour and grain trade in the N. Y. Produce Exchange and more particularly those interested in corn and corn products were pained and surprised to learn of the sudden passing away of their associate T. M. Bunch, aged 60. In the opinion of many there were few, if any, men in the trade who were better posted re corn products in every detail than Mr. Bunch. For years before coming to this market he had been actively engaged in the west in the distribution of corn or its products. Hence it was said that he was one of the best informed men in the trade re transportation matters. Because of this it was averred that his assistance had been found highly valuable to those officials responsible for the purchase and shipping of corn products, etc., to the Allies during the war.

TOLEDO

S. M. BENDER

CORRESPONDENT

THE month just passed has been one of liberal receipts in this market during the forepart and a gradual falling off during the past two weeks. A fair milling demand for wheat has caused an advance in Soft wheat premiums lately. Local mills have fair stocks but the southern mills have been good buyers. Flour trade has been quite lively for some time but in the past week has shown a tendency to slow down. Some export business has been done though offers were hardly more than the cost of production. Bakers are carrying enough flour to care for their needs for the present and will be cautious in their purchases. Mill-feeds have been taken by buyers without much trouble though cuts in prices are necessary occasionally to keep stock moving. Feed manufacturers report a good business in special brands and accumulations are small. The hay trade has experienced a dull month but no more than was to be expected at this time of year.

O. W. Cole, manager of the elevator at Jenera, Ohio, will go to Prairie Depot, Ohio, on May 1 to become manager of the elevator at that station.

The Chamber of Commerce trade trip is expected to be very attractive to Toledo grain men as the towns to be covered ship their grain to this market.

A large movement of Canadian wheat was made out of this market before the higher tariff went into effect. Many millers who had it stored here in bond paid the lower rate and shipped the grain to their own mills. Some few dealers were rushing around at the last minute trying to sell what they couldn't use but little trouble was experienced in disposing of it.

The Northwestern Ohio Farmers Grain Association met in the new town school at Waterville, Ohio, on Monday evening, April 7. H. O. Barnhouse, local manager for the Chicago firm of Hulburt, Warren & Chandler, discussed the McNary-Haugen bill in a most able manner. C. W. Palmer of Defiance, Ohio, gave his ideas of the bill from the farmers' viewpoint and then a lively discussion followed which was open to all. O. W. Cole of Jenera and Carl Romick of Arlington told of the possibilities of profits through the proper handling of livestock and shipping by country elevators. Eli Dickey of Jewell, Ohio, presided. Toledo grain men attending were: J. F. Streicher of J. F. Zahm & Co., George Forrester of the Kasco Mills, Inc., Paul Barnes of the Toledo Grain & Milling Company, Harry DeVore of H. W. DeVore & Co., George Woodman of the Rosen-

baum Grain Company, Ben Hoffner of Lamson Bros. & Co., Bill Cummings of J. F. Zahm & Co., Calhoun Cannon, Federal supervisor of Toledo, and Steve Bender and Herman Nesper of Southworth & Co.

C. A. Heigel, proprietor of an elevator at Leipsic, Ohio, called on his Toledo friends during the month.

Grain inspections for the month of March were: 341 cars of wheat, 371 cars of corn, 174 cars of oats, 15 cars of rye and 1 car of barley. Total, 902 cars.

J. D. Hurlbut, president of the Exchange, was given a handsome picture of himself this week when the *Blade* cartoonist did his darndest to make him unrecognizable. The pictures covering his early life were all O. K., and lots of Jesse's friends never knew his dad was the founder of the Toledo Fire Department.

Three carloads of flour belonging to the Mennel Milling Company received the fastest railroad service that has been known for some time. They left their Fostoria, Ohio, plant on Saturday morning at 7 a. m. via the Nickel Plate for Buffalo and left there Friday night via the Lehigh Valley for Bethlehem Junction, Pa. Arriving there at 7 a. m. they were switched to the P. & R. and arrived in Philadelphia at 9 a. m. They were lightered to an ocean vessel on Monday and cleared for Europe on Tuesday. The fact that three connections were made makes this stand out as an excellent example of railroad service.

Clover seed is lower because of a disappointing cash demand from country dealers. The season is late, however, and there is still hopes of a rush period during this month. Stocks are large here but could easily fade away with a brisk demand. Liberal amounts of Clover will be carried over as the price of October is attractive. Purchases of October are noted on the declines as this new crop future offers many opportunities to seed investors. A small crop again this year is expected by many who feel that winter killing and reduced acreage will cut great inroads in the new crop. Others point out that it is too early to make accurate predictions and some time must elapse before the actual condition of the seed plant will be known. Large amounts of prime were delivered on March contracts and went into strong hands. Alsike and Timothy, like Clover, need an active cash demand to start some interest in the future months. They have both remained steady during the month.

Soybeans are receiving the once over by farmers of Lucas County and local seed dealers report the inquiries about them are more numerous than ever before. A large acreage is expected to be sown in this territory.

Several members of the Exchange Traffic Club attended the meeting of the Great Lakes Regional Advisory Board in Erie, Pa., April 8. A survey of railroad service in this territory was given and many other topics of interest to shippers were discussed by railroad officials and attending members. The board was extended an invitation to hold their annual meeting in Toledo in June.

A plea for more care of soil by farmers was made by Charles H. Allen, president of the Farmers Sugar Company, Defiance, Ohio, at a meeting held in the Chamber of Commerce during the month. He suggested the raising of sugar beets as an excellent way to give back some of the elements taken by other crops. There is only 40,000 acres under cultivation for sugar beets in northwestern Ohio, said he, and there are 3,000,000 acres available.

Deshler, Ohio, has been the scene lately of several fires of a serious nature. Three elevators have been the victims. Two of them burned completely and a third was saved by the quick work of residents. The Farmers Elevator suffered the most with a loss of \$25,000. Two boys caught in Napoleon, Ohio, after trying to set the elevator afire are believed to be the ones who were working in Deshler.

John G. Steuer, manager of Jackson Bros. & Co., local branch on the Exchange floor, died Saturday, March 29 at the age of 50 years. His health has been failing for the past two years but in spite of this he lost but little time from his work. He enjoyed the good-will of every member of the Exchange of which he was a member and his life record is one of which any man could be proud. John started as a messenger boy for the Western Union at the age of 11 and worked his way up to the position of manager of their branch on the old exchange floor. He was then 28 years old and a few of the old timers say a finer specimen of health and manhood could not be found. The work of a private wire operator appealed to him and he started in with the old firm of Miner & Co. Then followed service with Pringle-Fitch & Co., Harris-Winthrop & Co., and the firm he was with when he died. He was a member of the Chicago Board of Trade and considered this a most signal honor. His wife and family consisting of two sons, a daughter and three grandchildren survive him and were with him when he died. John was one of Toledo's most ardent baseball fans and when the World's Series were being played he could always be found at his wire getting

first hand news of the games. He was looking forward to his regular berth in the Toledo stands as the prospects for this year's team are so bright. His cheerful smile and jolly manner will be missed on the floor where he spent so many years of his life. The floral offerings at his funeral were beautiful and in a small way expressed the sorrow of many friends.

Since the death of John Steuer the private wire of Jackson Bros. & Co. on the Exchange floor has been handled by Henry Ostrander, formerly with the firm of David Robinson & Co.

An extensive campaign to stamp out the European corn borer in Lucas County is to be carried out this year. The infested townships will be visited by county agents and state agricultural officials who will educate the farmers as to how this dangerous pest can be eliminated. Many farmers have already been asked to burn stalks that are left standing.

Charles Keilholtz of Southworth & Co., was 32 years old on March 25, and received the congratulations of his many friends.

Raymond P. Lipe, from the wilds of South Africa, sends his friends very artistic picture postcards including one of his wife and self in a native drawn buggy that looks good for about two miles an hour. He writes that he is learning the ways of the Englishman, teas and all, but has not as yet acquired a long list of titles.

C. S. Coup, general manager of the Northwestern Elevator & Mill Company, celebrated his fiftieth birthday March 22, and was ably assisted by local members who wondered how he had retained his youth.

E. O. Williams has taken over the duties of Ray Donnan, Lucas County Farm Agent, who recently resigned. Mr. Williams is a graduate of the agricultural department of the Ohio State University.

The Twentieth Anniversary Meeting of the Ohio State Millers Association will be held in the Southern Hotel, Columbus, Ohio, April 16-17. All past officers will be honored guests and the program contains some features that will be of interest to all millers. J. D. Hurlbut, president of the Toledo Produce Exchange, will be toastmaster, at the Fellowship Banquet.

The Produce Exchange Traffic Club held their regular monthly meeting in the Elks Club on Thursday, March 20. After a big delicious steak was ground for Lester Howard and a few other guys with plates the meeting became interesting. The traffic commissioner, L. G. Macomber, and John Enright of the Mennel Milling Company told the boys about a lot of things they already knew but nevertheless no one interrupted them because the time had to be killed in some way.

J. W. Knox and A. G. Newell have purchased the elevator formerly operated by Hirsch Bros. at Converse, Ind. The new firm will be known as the Converse Grain & Seed Company.

H. M. Unger has taken over the elevator at Jefferson, Ind. He is one of the old firm of David Unger & Sons formerly located at Russiaville, Ind.

News from W. E. Savage of the Imperial Grain & Milling Company, who is regaining his health at Palm Beach, Fla., tells of the fine boating, bathing and other sights and amusements which makes us believe any man could get well there.

Rush Croninger of Grand Rapids, Ohio, had 12 of his boys (not all his own) down on the Exchange floor this month. They saw how the grain from the farms, where many of them live, was graded and sold to the highest bidder and went home with a better idea of how the marketing machinery works.

The Lake Erie Milling Company has recently installed a Randolph Molasses Feed machine that is one of the latest inventions of O. W. Randolph of grain drier fame. It is one of the few in the whole country to have one of these valuable feed mixers.

Among the visitors on the Exchange floor and at the offices of members during the past month were: Charles H. Harris, Dull & Harris, Deshler, Ohio; John Moser and J. F. Frisinger, of Moser, Frisinger Company, Rockford, Ohio; Del Lloyd, Waterville, Ohio; L. J. Ducat, Bowling Green, Ohio; J. Proctor Towson, J. Proctor Towson Company, Baltimore, Md.; F. K. Montgomery, National Biscuit Company, New York City; Charles Kirk, Findlay, Ohio; L. C. Schmunk, Antwerp Equity Exchange, Antwerp, Ohio; P. J. Pfau, Bolivar, Ohio; R. G. Pearse, Port Huron, Mich.; L. S. McDonald, McDonald Commission Company, Boston, Mass.; J. F. Hall, Pittsburgh, Pa.; Frank Z. Renollet, Renollet Equity Exchange, Cecil, Ohio; Ross Eldridge, Rudy-Patrick Seed Company, Kansas City, Mo.; Al Bather, Northrup-King Company, Minneapolis, Minn.; Frank W. Hotchkiss, Norris Grain Company, Chicago, Ill.; George W. Goodwin, Taggart Bros. Bag Company, Watertown, N. Y. There was also seen approaching one day a bag salesman known in this market as Dixie Leake. The reason his coming was heralded long before he arrived was due, to a bright red light on his nose.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

The Federal Grain Corporation, Inc., Bridgeport, Conn., has been incorporated. Capital stock \$100,000. The incorporators are Harry Schwartz and Mary Molloy of Bridgeport and Helen Mullins of Fairfield.

The Grain Board voted to go on record in opposition to the McNary-Haugen Bill at a well attended meeting of the members. The closing words of the resolution which was adopted, sums up the consensus of opinion on the part of the members:

It would paralyze the legitimate and essential handling, milling and distribution of grain and grain products and would gravely affect the baking industry. Under its operation wholesalers, retailers' and bakers' stocks would be wholly inadequate to preserve normal price to consumer as merchants and manufacturers would not assume risks resulting from monthly or periodic price-fixing by the Government.

Eastern States Farmers' Exchange, with headquarters at Springfield, Mass., according to Howard W. Selby, general manager, did a business in 1923 of \$4,651,508, and handled a total of 97,536 tons of commodities. Forecasting business for the present year, he claims that the outlook is good for an increase of around 50,000 tons. A large percentage of the commodities handled beside the farm products, was feedstuffs for the farmers' use. A membership of about 12,000 farmers was served.

The Boston Grain and Flour Club recently held its annual banquet at the City Club, Boston. The occasion was the scene of "rare and glorious festivities." In addition to the program of speeches, eats and various forms of entertainment, prizes were awarded to winners of the club's bowling, billiard and pool tournaments which were held in the afternoon. The winning bowling team comprised A. T. Safford, Geo. Collier, Edward Clapham, Fred Volkman, Stephen Donohue, Chas. Stolte, Joseph Sennett, John King and Nate Gilbert. Charles Hardy, Phillip Whipple and Rodney Hardy won billiard contests. Tim Falvey and Tom Maloney were the winning pool team.

In the city of New London, Conn., there still is operated a grist mill that was erected in 1650. It is in a good state of preservation, and the power is provided by an over-shot water wheel. Nine generations of Connecticut farmers have procured their cornmeal and corn chops at Ye Old Town Mill.

Corn and oats are ruling about steady. Feedstuffs are weaker with some pressure to sell. Cornmeal and oatmeal held at unchanged prices. Medium and low grade hay are in over supply. Receivers inclined to make concessions to move cars and avoid storage charges. Strictly top grades scarce. Rye straw dull and easy.

Among the visitors to the Chamber during the month of March were the following: E. Gonzenbach, Sheboygan Falls, Wis.; Harry J. Walter, Buffalo, N. Y.; Theo. F. Ismert, Kansas City, Mo.; E. G. Brush, Moira, N. Y.; A. V. Turner, Modesto, Calif.; L. Yamamoto, China; L. N. Osgood, Minneapolis, Minn.; Reginald Aitken, Charlottetown, P. E. I.; H. D. Yoder, Topeka, Kan.; H. A. Viese, Iowa Falls, Iowa.

Receipts of grain here for the month of March were as follows: Wheat, 41,100 bushels; corn, 11,523 bushels; oats, 89,725 bushels; rye, 10,450 bushels; barley, 200 bushels; malt, 7,450 bushels; mill feed, 574 tons; cornmeal, 1,055 barrels; oat meal, 1,925 cases; oat meal, 75 sacks.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

There is prospect for a good wheat and hay crop this year in Williams County. Both seedings have wintered well.

Raabe Bros., grain dealers at Fort Jennings, have bought a site at Muntanna, a station on the Clover Leaf Railroad, where they will build an elevator.

The Tiffin Farmers' Exchange Company reorganized for the year by electing J. A. Gillig, president; W. G. Herbst, vice-president; Charles Gillig, treasurer and F. S. Arbogast, secretary.

R. D. Sneath, of the Sneath-Cunningham Company, Tiffin, has returned after spending a number of weeks at Miami, Fla. He returned by way of Washington, where he stopped for a short visit.

Edward Hartman was arrested, March 29, at North Baltimore after he had cashed a check for \$49.86 obtained by selling a load of his employer's corn to the Sneath-Cunningham Company elevator at Watson.

Cases of the youths held in connection with the theft of Clover seed from the Mt. Blanchard, Rawson and Vanlue elevators were disposed of at Findlay when terms in the state reformatory and Ohio penitentiary were given five of those indicted. Paul Myers, Ralph Winstead, John Crawford and Corliss Lee were sent to the Mansfield reformatory, and Orville Kemerly was sent to the

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state penitentiary. The latter had formerly served a term at Mansfield. Ralph Lee, indicted on a charge of concealing stolen grain, pleaded not guilty and his trial was set for April 3.

Three corn belt states—Ohio, Illinois and Indiana—have joined forces to check the inroads of the European corn borer, found last year in 10 northern Ohio counties. They will ask farmers in those counties to set aside the week of April 21 to 26 for a concentrated attack on the corn borers, and to center their efforts on the burning of corn stalks.

A committee of 25 having obtained 90 members and donations amounting to over \$7,500, a Board of Trade will be established at Elyria as soon as the charter can be obtained.

Deshler, Ohio, has suffered from an unusual number of elevator fires—three within two weeks. On Sunday afternoon, March 30, the Deshler Farmers Elevator Company elevator burned with a loss estimated at \$25,000, partly covered by insurance. On the following Sunday, April 7, another elevator belonging to this same company burned with a loss of \$30,000. The first volunteer fire fighters who entered the building said they found in an inner office grain sacks soaked with coal oil and partly burned. The fire in the sacks apparently had smothered out, but the elevator was afire in another part. In the burned building were three cars of corn, two cars of oats and one car of wheat, besides seed, plows, fencing and roofing. There was \$20,000 insurance on the building. On the night of April 9, an elevator owned by George Dull and Charles Harris was set on fire, but the blaze was extinguished before much damage was done. The blaze was discovered about 9 p. m., when an employee returned to the office to get some papers from the safe. He found quart cans of gasoline and burning oil-soaked rags in a passage way. The state fire marshal has begun an investigation of the fires.

Oats and soybeans seem destined to replace wheat on many farms in central and southern Ohio this spring. Winter wheat, according to reports coming in steadily to Ohio State University, is in poor shape in the southern half of the state. It suffered this winter because of lack of snow.

The residence of Frederick C. Ohlemacher, president of the Avery Grain & Elevator Company, near Avery, burned.

With fees all but doubled, the Ohio Seed Improvement Association proposes during the coming year to develop new sales channels of Ohio-grown certified wheat, oats, soybean and corn seed.

A. A. Cunningham, president of the Sneath-Cunningham Company, has been re-elected president of the Citizens' Building & Loan Association, Tiffin.

B. B. Copley has sold his elevator at Millersville, Ohio, to Charles Hughes of that place. The grain department of the business, as in the past, will be conducted by the Sneath-Cunningham Company, Tiffin, Ohio.

Wheat is looking fine throughout this territory, that is to say in Seneca, Crawford, Wyandot, Sandusky, Hardin and Marion Counties. Farther south, the writer understands it has wintered very badly, and little is expected of it there.

The spring movement of corn has been rather disappointing, and only a moderate amount has come to the elevators. Much more corn has been fed, and is being fed, than had been anticipated. Corn did not keep any too well in the cribs, and many farmers fed it up rather than take chances on it spoiling in the cribs.

Oats sowing is very far behind in this locality, the first drilling being done April 10—and then farmers complained of the ground being almost too "sticky." Plowing has been going on since the week beginning April 7, but there is still much of this to be done, and unless the weather from now on proves exceptionally favorable, both corn and oats crops are bound to get a very late start. Farmers in Marion, Wyandot and Hardin Counties have been urged to procure a different type of seed oats, as this crop for the last two years has practically failed and been very light in quality and yield. In spite of this, many of them will use this same light-weight oats for seed, which is bound to result in a repetition of the failure of the last two years.

In the matter of field seeds, farmers all over this territory, this spring, seem to have gone in pretty generally for Sweet Clover, Alfalfa and Soybeans, which up to this time have only had a scattered following here. Medium Clover still holds its own pretty well, but many Alsike growers have gone over to Sweet Clover. Considerable seed corn has been shipped in here, as the excess of moisture in the crop of last fall made much of it unfit for seed purposes.

According to Wallace E. Hanger, crop specialist, the seed corn situation in Ohio is not as serious as in 1918, although it is the most serious since that time. He says there is poor seed corn in Ohio, according to a recent survey, particularly in the northern half of the

state; but by acting promptly and conducting more germination tests than they've tried since 1918, farmers can get enough good seed corn within the state.

Charles Ash, of the elevator firm of Ash & Ash, Amsden, Ohio, and president of the Commercial Bank & Savings Company, Fostoria, recently became sole owner of the Ash-Kiskadden business block in that city.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for March:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

	Receipts	Shipments
	1924	1923
Wheat, bus..	1,380,621	1,373,560
Corn, bus....	910,959	1,756,556
Oats, bus....	130,011	127,585
Barley, bus..	23,354	4,554
Rye, bus....	310,063	1,835,808
Malt, bus....	6,688	12,962
Straw, tons..	114	38
Millfeed, tons	859	1,197
Hay, tons....	2,428	1,497
Flour, bbls..	107,043	85,068

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	1,610,000	1,627,000
Corn, bus....	9,257,000	11,406,000
Oats, bus....	5,704,000	6,370,000
Barley, bus..	819,000	987,000
Rye, bus....	287,000	382,000
Timothy Seed, lbs.	1,815,000	1,697,000
Seed, lbs....	2,054,000	1,825,000
Other Grass Seed, lbs..	2,995,000	1,691,000
Flax Seed, bus.	43,000	1,000
Hay, tons....	11,706	11,925
Four, bbls..	972,000	1,418,000

CINCINNATI—Reported by D. J. Schuh, executive-secretary of the Cincinnati Grain & Hay Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	399,000	358,800
Corn, bus....	569,800	370,000
Oats, bus....	436,000	428,000
Barley, bus..	2,800	9,100
Rye, bus....	2,800	3,600
Kaffir Corn, bus.	4,200	.....
Hay, tons....	8,844	7,400

DENVER—Reported by C. B. Rader, secretary of the Grain Exchange:

	Receipts	Shipments
	1924	1923
Wheat, carloads ..	210	247
Corn, carloads ..	396	375
Oats, carloads ..	77	83
Barley, carloads ..	31	18
Rye, carloads ..	.....	4
Kaffir Corn, carloads ..	1	.....
Hay, carloads ..	58	87

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	1,398,322	2,495,333
Corn, bus....	2,637,099	65,213
Oats, bus....	271,533	34,559
Barley, bus..	16,284	88,127
Rye, bus....	574,139	1,949,592
Flax Seed, bus.	104,860	75,256
Flour, bbls..	57,085	84,280

PORT WILIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

	Receipts	Shipments
	1924	1923
Wheat, bus..	2,541,991	5,991,855
Corn, bus....	3,033	4,588
Oats, bus....	3,568,166	1,429,378
Barley, bus..	661,715	608,677
Rye, bus....	21,657	384,023
Flax Seed, bushels ..	54,455	48,058

INDIANAPOLIS—Reported by secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	226,000	202,000
Corn, bus....	1,211,000	1,711,000
Oats, bus....	810,000	1,060,000
Rye, bus....	9,000	22,000

KANSAS CITY—Reported by U. R. Scott, secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	2,616,300	3,484,350
Corn, bus....	2,086,250	1,431,250
Oats, bus....	695,300	936,700
Barley, bus..	72,000	15,000
Rye, bus....	18,700	8,800
Bran, bus....	2,080	3,880
Kaffir Corn, bus.	398,200	169,400
Hay, tons....	28,368	27,132
Four, bbls..	42,900	70,200

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts	Shipments
	1924	1923
Wheat, bus..	149,800	222,400
Corn, bus....	2,478,480	1,793,740
Oats, bus....	1,150,600	2,172,000
Barley, bus..	683,200	780,520
Rye, bus....	944,330	251,870
Timothy Seed, lbs.	724,700	1,235,551
Clover Seed, lbs.	152,646	248,606
Flax Seed, bushels ..	12,870	101,274
Hay, tons....	1,644	1,296
Flour, bbls..	125,930	78,840

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

	Receipts	Shipments
	1924	1923
Wheat, bus..	7,481,790	10,449,950
Corn, bus....	2,112,630	820,440
Oats, bus....	1,832,190	1,891,060
Barley, bus..	1,158,630	1,314,350
Rye, bus....	449,810	841,800
Flax Seed, bus.	229,280	319,480
Hay, tons....	3,961	3,191
Flour, bbls..	116,192	146,863

MONTREAL—Reported by J. Stanley Cook, Secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	411,451	997,939
Corn, bus....	43,613	23,650
Oats, bus....	376,100	417,269
Barley, bus..	59,337	125,921
Flax Seed, bus.	55,463	59,423
Hay, bales....	64,802	96,006
Flour, bbls..	170,439	149,428

NEW ORLEANS—Reported by S. P. Fears, chief grain secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	3,702
Corn, bus....	100,000
Oats, bus....	965,983
Rye, bus....	1,972,920

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	5,611,000	6,798,400
Corn, bus....	948,000	1,270,500
Oats, bus....	728,000	1,304,000
Barley, bus..	219,300	394,400
Rye, bus....	427,500	329,900
Timothy Seed, lb.	.....	.....
Clover Seed, bags	2,417	1,212
Other Grass Seed, lb.	.....	.....
Hay, tons....	6,734	9,249
Flour, bbls..	1,151,688	1,142,000

OMAHA—Reported by F. P. Manchester, Secretary of the Omaha Grain Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	1,052,800	1,545,600
Corn, bus....	2,892,400	1,541,400
Oats, bus....	1,302,000	1,520,000
Barley, bus..	14,400	76,800
Rye, bus....	32,200	102,200

PEORIA—Reported by John R. Lofgren, Secretary of the Board of Trade:

	Receipts	Shipments
	1924	1923
Wheat, bus..	72,000	92,400
Corn, bus....	1,074,750	1,601,750
Oats, bus....	1,058,800	1,401,600
Barley, bus..	105,000	23,800
Rye, bus....	1,200	10,800
Mill Feed, tons	41,420	31,040
Hay, tons....	1,680	1,520
Flour, bbls..	227,200	157,600

PHILADELPHIA—Reported by A. B. Clemmer, Secretary of the Commercial Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	4,326,187	2,427,857
Corn, bus....	910,905	878,877
Oats, bus....	299,490	142,653
Barley, bus..	1,661	31,336
Rye, bus....	78,675	93,819
Flour, bbls..	197,248	317,378

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce:

	Receipts	Shipments
	1924	1923
Wheat, bus..	788,277	1,976,325
Corn, bus....	127,893	17,025
Oats, bus....	197,949	325,324
Barley, bus..	25,636	471,356
Rye, bus....	.....	135,320

ST. LOUIS—Reported by Eugene Smith, Secretary of the Merchants' Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	1,655,991	2,312,821
Corn, bus....	2,863,443	2,844,618
Oats, bus....	2,670,000	3,285,670
Barley, bus..	84,800	46,400
Rye, bus....	35,100	23,100
Kaffir Corn, bus.	74,400	18,000
Hay, tons....	12,036	12,086
Flour, bbls..	450,790	409,840

SAN FRANCISCO—Reported by Henry C. Bunker, chief inspector of the Chamber of Commerce:

	Receipts	Shipments
	1924	1923
Wheat, tons	6,145	2,448
Corn, bus....	1,368	2,038
Oats, tons....	643	1,130
Barley, bus..	18,728	20,037
Bran, tons....	560	237
Beans, packs	71,386	184,390
Hay, tons....	2,706	4,693

SUPERIOR—Reported by E. W. Feidler, chairman of the Wisconsin Grain and Warehouse Commission:

	Receipts	Shipments
	1924	1923
Wheat, bus..	567,727	485,865
Corn, bus....	1,972,326	.....
Oats, bus....	82,679	.....
Barley, bus..	12,773	171
Rye, bus....	262,488	.....
Bonded Wheat, bus.	8,668	.....
Bonded Oats, bus.	2,586	.....
Bonded Barley, bus.	1,678	.....
Flax Seed, bus.	93,521	45,945

TOLEDO—Reported by Archibald Gassaway, Secretary of the Produce Exchange:

	Receipts	Shipments
	1924	1923
Wheat, bus..	463,400	302,400
Corn, bus....	463,750	356,250
Oats, bus....	356,700	251,100
Barley, bus..	1,200	3,600
Rye, bus....	18,000	19,200
Timothy Seed, lbs.	1,215	1,144
Clover Seed, lbs.	4,863	8,341
Alsike, lbs....	318	1,804

ASSOCIATIONS

CONVENTION CALENDAR

April 17-18. Western Grain Dealers Association, Cedar Rapids, Iowa.
May 9-10. Illinois Grain Dealers Association, Leland Hotel, Springfield.
May 14-16. Kansas Grain Dealers Association, Coates House, Kansas City, Mo.
May 20-21. Oklahoma Grain Dealers Association, Oklahoma City, Okla.
May 23-24. Texas Grain Dealers Association, Landa Park, New Braunfels, Tex.
June 5-6. American Feed Manufacturers Association, Congress Hotel, Chicago.
June 9-14. American Association of Cereal Chemists, Curtis Hotel, Minneapolis, Minn.
June 10-12. National Scale Men's Association, Curtis Hotel, Minneapolis, Minn.
June 16-17. Wholesale Grass Seed Dealers Association, Drake Hotel, Chicago.
June 18-20. American Seed Trade Association, Drake Hotel, Chicago.
July 1-2. National Hay Association, Cedar Point, Ohio.
September 22-24. Grain Dealers National Association, Hotel Gibson, Cincinnati, Ohio.

NORTH DAKOTA DEALERS MEET

The Farmers Grain Dealers Association of North Dakota held its 1924 convention at Fargo, N. D., March 19-21. The attendance was even larger than usual and comprised one of the most satisfactory gatherings of country elevator men in the history of the association.

The convention was called to order at the Gardner Hotel by R. F. Gunkelman, president. Among the preliminary addresses was one by H. W. Geary, president of the Fargo City Commission, who presented the official welcome.

President Gunkelman's address was filled with interesting and instructive comment on the vital issues of the day. After alluding to the increases in membership in the association and asserting that the most satisfactory year in their history had just been completed, he took up the McNary-Haugen bill. He said that the preceding year the association had discussed voluntary pooling, while now the issue could be described as "involuntary pooling." He added that he wanted to bring before the meeting some of the high points of the bill, outlining the claims of its sponsors and pointing out its dangers and disadvantages to both the farmers and the grain trade. After outlining the provisions of the proposed legislation, Mr. Gunkelman said:

"The bill is economically unsound. It is complicated, expensive to administer, and shows that its sponsors know nothing of the export problem and very little in regard to the handling of farm products. It is endorsed by every radical in Congress. It would impose a direct tax of seven cents per bushel on wheat as it leaves the farms. This tax would be a certainty for the farmers to meet. The increased price would be a question."

He characterized the bill as "paternalism run wild" and said the measure was a deliberate attempt to defeat the law of supply and demand by forming a monopoly supposedly for the benefit of producers. He also called attention to the tremendous expense of such an unwieldy organization as would be necessary to put the new law into operation, and said that men of necessary ability to guide such a colossal organization could hardly be induced to assume the task in time of peace at the small salaries specified. Hence, incompetent bureaucrats would be at the helm with the usual gross extravagance.

Following the address of the president, P. A. Lee, secretary of the Association, gave his report. Another of the leading speakers was Dr. John Lee Coulter, president of the North Dakota Agricultural College. He told the grain dealers that if they wanted to aid in helping their state, one of their best opportunities would lie in developing the diversified farming program. Dr. Coulter said that within a very few years the farmers of North Dakota would be well on the way toward a very profitable type of agriculture based on the principles of diversified farming.

He then proceeded to explain how the managers of local elevators could help and how it would affect their business. He said that in the first place, the reduction in acreage of small grains, along with the reduction in volume of grain to be handled, would make it possible to take advantage of the opportunity to clean the grain passing through the hands of the elevator men. Another opportunity pointed out was that of grinding both the weed seeds, to provide a better feed and so that they may not get back into the ground to

grow again, and also the grinding of other seed grains such as barley, oats and corn.

"Another opportunity which is opening to the elevator," said Dr. Coulter, "is the handling of choice seeds such as seed corn, Sweet Clover, Alfalfa, field peas, soy beans, and other feed and forage crop seeds. This would be in addition to the regular traffic in wheat, oats, barley, flax and rye. I do not have in mind merely the supplying of seeds to the farmers of the community."

All the officers of the association were re-elected. The list includes R. F. Gunkelman, Fargo, president; P. A. Lee, Grand Forks, secretary, and G. H. Bruns, Hazen, field secretary.

The directors chosen were L. S. Smith, of Emerado, from the first district; George Knause, of Hannaford, from the second district; R. H. Patten, of Parshall, for the third district. Andrew Robbie, of Cavalier, was chosen director at large. The meeting place chosen for 1925 was Bismarck.

Resolutions adopted included one petitioning congress to act favorably on the Newton bill, and another authorizing a legislative committee of the Association to attend the next session of the legislature to work for measures benefiting the grain trade, especially those referring to liens on grain, etc. There was also a resolution adopted opposing the amendment of the Transportation Act of 1920.

ANNUAL MEETING OF ELEVATOR INSURANCE FIELDMEN

The seventeenth annual meeting of the Mill and Elevator Fieldmen's Association was held at the Hotel Sherman in Chicago, April 1-4. An excellent program had been prepared, and a good attendance assured the various speakers listed of an appreciative audience. The arrangement of the program showed that the Association officers had carefully kept in mind the avowed purpose of the organization, "to broaden the knowledge of its membership in the field of underwriting; to secure their co-operation in the safe-guarding of life and property."

President H. B. Carson called the meeting to order Tuesday, April 1 and after brief preliminaries, including the roll call and other routine matters, the committees on auditing, resolutions, and nominations were designated.

C. D. Kellenberger, treasurer, read his report, and following this V. R. Johnson, chairman of the Executive Committee, read the committee's report.

After the election of new members the president's address was given by Mr. Carson, and met with well deserved enthusiasm.

Following this was a speech on "Field Work." This was given by A. D. Baker, who is well known to the trade as secretary of the Michigan Millers Mutual Fire Insurance Company and president of the Secretaries Association and Mutual Fire Prevention Bureau.

The morning session of the first day was closed by A. P. Husband's address on "Topics of Interest." Mr. Husband is secretary of the Millers National Federation.

The afternoon session commenced with an address by C. R. McCotter on "Profit and Loss from Country Elevator Business and the Effect on the Insurance Business." Mr. McCotter began by briefly describing new conditions which business has had to meet and discussed the direct and indirect results of the upheaval due to the war. His talk had several salient points which are of material interest to the elevator manager. He said:

Grain is going to continue to be marketed at the country station, and no matter what change in marketing conditions develops, there is always going to be a need for the country elevator in the surplus producing states. There are conditions, however, that are developing in many sections, that are having a marked effect on the grain business, due to the change in the business methods of the farmer. It is not long ago that the *Market Record*, published in Minneapolis, carried a news item of the wrecking of an elevator which was the last grain elevator in the county. This had at one time been a county that shipped a great deal of grain, but due to farmers changing from raising grain only, to feeding and going into the dairy business, the surplus that formerly was shipped, is now consumed at home. Possibly this is the only case of an entire county being affected to such an extreme extent, but there is a gradual change in many territories along this line, and it is up to the grain dealer to meet these issues as they develop, and not try to stand pat on his previous success and sit idly by and watch his property become worthless. Where these changes have taken place there is opportunity for grinding feed, in addition to handling mill feeds and other side lines. There are large sections of some states where now the profit to the grain dealer on his feed business is in excess of the profit on grain. It seems to me that we can in a measure be of service in counselling with our policyholders where we see changes of this kind developing; show them how this has successfully been met in other cases, and give them the advantage of the experience that we should have gained by keeping posted on general business conditions in our entire field.

The next speaker was R. H. Bowman, who had as his subject, "Auditing Country Elevator Accounts." His remarks included a comprehensive commentary, though, as he stated at the outset, his assertions were mainly based on experiences in North Dakota, western Minnesota, eastern Montana and northern South Dakota. He said that farmers' co-operative organizations constituted an important element in the elevator business of that region. He also went on to say that in most cases these companies are not strictly co-operative in the sense that all earnings are divided among members. They are stock companies, with provisions made for setting apart small reserves, payment of a reasonable interest rate on the stock, and the balance of the earnings being pro-rated in some cases to members only, in others to members and non-members.

Mr. Bowman said that the financial statement in itself does not always tell the whole story: the attitude of the directors toward the extension of credit, their ideas with regard to engaging in side lines, their understanding of the value of creating reserves, etc., for the protection against possible future losses, these and a host of other things are of the utmost importance in considering the financial record of an insurance risk. He went on to say:

Thus it is, that I have come to the conclusion that it is not well to judge a company's financial well-being from one statement. I believe that insurance companies should seek statements at regular intervals—not less than twice each year, and arrange for their compilation so that at the end of two, three or four years, it will be possible to determine at a glance the trend the business is taking.

The companies which we field men are representing have many instances to which they could refer you, in which, when the risks were first taken on, they were operating at substantial profits, only to have the earnings decrease from year to year, until they have developed into undesirable risks.

This condition may be the result of poor management, or may be due to other conditions. The building of a new railroad branch line may have eliminated much of the company's best territory, thus reducing the volume of grain available. The territory may be changing over gradually from a grain-growing territory to greater diversification including dairying, which leads to the raising of feed crops, etc., which are not handled through the elevator. Poor crops over a period of years may have operated, too, to cut down the volume.

This element of volume is of extreme importance and we find no reference to it in a mere financial statement. We have found in North Dakota that the average cost of handling grain in farmers' elevators approximates five cents per bushel, with the result that the average elevator must handle from 75,000 to 100,000 bushels of grain in order to pay running expenses.

In order, therefore, to properly analyze the financial desirability of a risk, one should have for consideration, not only a financial statement, or balance sheet, but a statement of receipts and shipments of grain, for verification of the insurance inspection reports which provide information as to the volume handled by the station and the volume handled by the risk.

I have in mind another very important element which might very easily be overlooked by one not entirely familiar with the elevator business but which has an important bearing on the financial record of a risk, and that is the hedging element. It may be justly said that technically accurate hedging is not always the most profitable course for an elevator company to follow. We know of cases during the fall and winter of 1920-21, in which the elevators shipped out large quantities of stored grain, disposed of same at the terminals without buying back futures to protect it, and because of the fact that the grain was sold at a premium, and that later prices fell—with the result that the storage tickets were redeemed at much lower prices than the grain covered by these tickets was actually sold for, the elevator company made substantial, and in some cases, very large profits. We know, too, of cases during that same period when elevator companies who kept all purchases and sales very carefully hedged, lost money. Nevertheless, the fact remains that year in and year out, the only safe course for any grain dealer to pursue is to keep properly hedged. I will venture to say that 75 per cent of the elevators in North Dakota who lost money during the season of 1920-1921, could have avoided the greater portion of these losses had they protected themselves properly with the hedging machinery provided. I will say, too, that most of the elevator companies in our section of the country who are today in bad shape financially, got into that condition during the season of 1920-1921. So, as I see it, it is of prime importance that the insurance company carrying a farmers' elevator company as a risk, should know something of the elevator's hedging operations. This can be obtained by requesting at various intervals, statement of the long and short condition from which one can tell at a glance whether all grains are properly hedged or not.

"Common Causes of Fire" was the subject of G. E. Wilson's address. He treated the topic in detail and gave much valuable information. The text of this address will be referred to more fully next month.

On Wednesday J. J. Fitzgerald talked on the "Standard Policy and its Relation to Forms and Clauses," and addresses were made by T. M. Van Horn, Eugene Arms, A. J. Kellenberger and I. J. Milligan.

Thursday was devoted principally to the remaining speeches and discussions. The questions under consideration related to competition among the insurance organizations and matters local to the work of the fieldmen.

The officers who were elected for the coming year were C. H. Hall, of the Michigan Millers Mutual Company, president; C. R. McCotter, of the Grain Dealers Fire Insurance Company, vice-president; H. C. Lee, of the Mutual Fire Prevention Bureau, secretary; and R. M. Maitland, treasurer.

The members of the Executive Committee will be V. R. Johnson, chairman, and C. W. Gustafson and R. A. Backus.

The Seed Corn Situation

A Survey of Available Seed Corn by Dealers in Many States, Find Situation Serious Except in the Northwest and Eastern Sections of the Country

There are numerous indications of a shortage of good seed corn this spring. This condition is likely to become more and more serious as the season advances, and in order that our readers might have authoritative information from those who are on the ground handling seed corn, we are publishing letters from recognized and responsible seed corn dealers in different sections of the country, which in a very clear way show that "all is not well" with seed corn.

A USUAL CROP

The corn fully matured here with us, and we had the usual crop last season.—*Edgar F. Hurff, Swedesboro, N. J.*

GOOD SEED GOING QUICKLY

Our stocks of Improved Leaming, Improved Golden Dent, and Pride of North are limited; we have a fairly good stock of wheat we call Henry County Dent or good Dent corn that will test 85 to 90 per cent, but the demand is cutting into our stock every day. We are satisfied customers who wait will have a serious time getting good corn.—*VanNess & Johnson, Napoleon, Ohio.*

GOOD SEED SCARCE

Good seed corn is very scarce in this section of the country this season. Corn did not dry out thoroughly on account of the mild winter, therefore quite a lot of corn spoiled and could not be used for seed purposes. The demand is strong and the price higher than usual. We still have a limited supply of field corn to offer but do not expect it to last very long. The high price of feeding corn will no doubt hold the price high on good seed corn the balance of this season.—*Geo. R. Pedrick & Son, Pedricktown, N. J.*

NOT SO PESSIMISTIC

The writer has passed through 26 years in playing the seed game and what we are going to say is very brief, but the writer knows of no business that is absolutely built up on fear as the seed business. All the seed papers are all the while preaching "NO SEED! NO SEED!"—first one variety and then another and now the seed papers are full that there is not going to be any seed for next year. While you probably will not want to publish this letter you could state to all the dealers that there will be plenty of seed to go around.—*The Forrest Seed Company, Inc., Cortland, N. Y.*

SHOULD TEST SEED CORN

The seed corn situation in this territory is not good. Seed corn of high quality is scarce. Publishers of trade papers reaching those interested in corn should warn all planters to test their seed corn this spring.

We have been testing continually during the fall and winter finding most cribs falling below 60 per cent—some as low as 10 per cent.

Our stock in hand of standard White and Yellow varieties show germination tests of 88 per cent to 94 per cent.—*Council Bluffs Seed Company, Seed Corn Specialists, Council Bluffs, Iowa.*

SITUATION DISASTROUS

The situation in eastern Nebraska has been almost as bad as the most disastrous year within the writer's recollection. It has been possible to find corn of good germination, but difficulty in preparation has been great, due to the heavy moisture content and the high percentage of dry rot in all of the corn. We have learned through our experience of the past winter that the best seed corn can only be produced through the most careful ear sorting of the very best cribs which can be located. Farmers as a general rule are not aware of the seriousness of the situation.—*The J. C. Robinson Seed Company, Waterloo, Neb.*

HIGH GRADE SEED CORN SCARCE

There is practically no high grade seed corn anywhere in the northern part of Ohio or in either Indiana or Illinois. As near as we can learn the corn all contained a high percentage of moisture and the severe cold weather in the winter killed the germination.

We have tested thousands and thousands of bushels and where corn was not taken care of last fall and put where the cold weather could not hurt it, it is absolutely unfit for seed. What the farmers are going to do for seed corn is more than we know. They do not seem to be much excited about it, and it is our opinion that they do not know their corn will not grow, but they are beginning to test it and

it looks like a serious situation. There are some scattered lots of old corn and these are rapidly being picked up for seed purposes, but aside from this we do not know where the farmers are going to get their supply. It is certainly a more serious situation than the farmers have any idea of.—*Oatman & Monfort, Cleveland, Ohio.*

SEED CORN NOT SCARCE HERE

From our viewpoint there is no particular scarcity of good seed corn in this territory.

We happen to have on hand between four and five thousand bushels of good quality seed that has been produced in Cass County, N. D., for several seasons, and we are in position to take care of any reasonable amount of trade on this commodity.

We understand that in some localities suitable seed corn supplies are very scarce but up-to-date we have not disposed of a very heavy percentage of our stock. Expect, however, that it will commence to move freely within the next couple of weeks.—*Amenia Seed & Grain Company, Amenia, N. D.*

SITUATION ANYTHING BUT GOOD

The seed corn situation in Iowa is anything but good. We have made a thorough survey of the condition over the entire state and find, while there are considerable amounts of corn that will test better than 85 per cent germination, there is considerable more that will go under this and very few farmers who did not pick and dry their seed corn early, can depend upon their corn for seed.

We are experiencing a heavier demand from the retail dealers over the state than ever before in the history of our business. The corn that we are offering was practically all dried by artificial heat before the severe freezes of the latter part of December and first part of January, and for this reason we feel that we are in equal or better position than any one in the trade, to supply dependable seed corn this season. Also, we are frank to admit that there is but very little corn up to the usual standard of Iowa seed.—*Jefferson Seed Houses, Jefferson, Iowa.*

MOST SERIOUS IN YEARS

The seed corn situation in Minnesota is more serious this year than any since 1918. Although Minnesota had a fine crop and a dry fall, the freeze of October 30 seriously injured most of the corn for seed, outside of that time. Fortunately our policy has been to pick and dry out seed corn early in October, consequently our Sterling seed corn was all under cover before the October 30 freeze. We have a quality of seed this year as high as any year, but those who depend on crib corn are having serious difficulties. Our April tests have just been completed—showing an average test of all our stock between 96 and 97 per cent. Stocks of high grade seed corn of this kind are in keen demand at a good price.

While we put up enough corn to plant nearly one-tenth of the total acreage in Minnesota, we doubt whether our stocks will last until planting time. Our sales to date are three times what they were last year at this time, and are especially heavy in states south and east, which were not so fortunate as Minnesota. We are still able to supply all the standard Minnesota and Wisconsin varieties and some that are adapted to northern Iowa.—*Northrup, King & Co., Minneapolis, Minn.*

CAREFUL SELECTION NECESSARY

The seed corn situation is very serious, we believe, in all sections of the country north of the middle sections of Kansas, Missouri and a line drawn through the entire United States. There are very few crops that will show good tests throughout Nebraska, Iowa, northern Kansas and northern Missouri and we believe all of the states east of there. A very large percentage of the crops have required artificial drying this winter to put them in good condition to be used for seed purposes. Nearly all of them have required very much closer sorting and grading and handpicking for seed purposes, showing very much larger shrinkage, causing very much higher cost of getting the stocks ready.

By careful selection, artificial drying, special grading and handpicking, we are getting out some fairly good high testing stocks, ranging around 90 per cent, but it is taking a great deal longer than usual and our output is limited and it is a question if the larger seed corn growers and handlers will be able to get sufficient stocks ready to supply the trade, especially for those who delay ordering their seed corn this year. We believe nearly all seed corn growers are working their plants to capacity and

are having difficulty in getting shipments off as promptly as their customers require same. We look for a rush of orders both by letter and telegram, which we and the other growers will be unable to supply before the end of the planting season, and the small seed trade, also jobbers and consumers who require seed corn, will do well to place their orders as early as possible, and even then may be unable to obtain all the stocks they will require as the longer they wait the scarcer the high test desirable stocks will become and harder to obtain.—*Western Seed & Irrigation Company, Fremont, Neb.*

GERMINATING QUALITIES LOW

A large part of the corn in that section of the corn belt where most of the corn in the United States is grown failed to mature properly last fall so that the germination was very low. In addition, much of the corn which showed a good germination test in December lost its germinating power during the severe freezing weather of January. For these reasons many sections of the country are now without sufficient seed corn to supply the demand.

Fortunately, however, a good supply of excellent high test corn has been reserved at central points, especially Chicago, and by using modern drying processes, this corn is going out showing germination test of 90 to 97 per cent, with a moisture content of 15 per cent or less.

Any of the country dealers, who do not know where to secure their supplies of good seed corn, can find almost any variety by applying to Chicago, Milwaukee, Minneapolis or St. Louis dealers.—*Barkenmeyer Grain & Seed Company, Chicago, Ill.*

SOME GOOD, SOME POOR

The seed corn situation in our territory, might be described as somewhat spotted. In certain districts, we are securing particularly nice, dry, high germinating corn. Of course all corn is showing more or less moldy ears and as a consequence, sorting has to be very, very carefully done.

With reference to what we might call general purpose corn, of which we handle considerable for fodder purposes, we have already shipped out a great many car loads of this, which have proven entirely satisfactory to the recipients.

Our own pedigreed seed corn, which was grown mostly in our own county, was picked and placed in our drying cribs early in the season, so that our corn is in excellent condition and we probably will have a surplus over what we will require for our regular retail trade. In regard to the general situation, there will be no scarcity so far as our territory is concerned. In fact we expect to be able to take care of outside demands in districts where they are not so favorably situated.—*Dakota Improved Seed Company, Mitchell, S. D.*

SEED CORN SUPPLY GOOD

Here in southern Minnesota, we had a very favorable corn growing season last year so that nearly all the corn came to the fullest maturing.

In some localities, more in the southwestern part of the state, some corn suffered on account of drought. The southern part of the state could well be classified with the corn growing belt for we are growing heavy types of corn, such as the Golden Jewel, Silver Jewel, Minnesota Ideal and also the Murdock Golden Dent Corn. Most of these varieties produce an average yield of 75 to 80 bushels per acre. Under favorable conditions, the Golden Jewel, Silver Jewel and also the Minnesota Ideal have yielded over 100 bushels to the acre.

We were fortunate enough to be able to put in a good supply of the heavy yielding varieties of seed corn mentioned—we specialize in seed corn and are in a position to furnish car load quantities. This is not corn that has been picked up in the open market, but seed corn grown for us under contract, from seed stock produced mostly on our breeding plots, so that we know the different varieties are true to variety and also true to type.

Such seed corn is husked as soon as mature and placed in narrow wire cribs, where it gets as much air drying as possible before it is taken in to be dried in our drying kilns. It is carefully cured and when through drying, it contains only 12 per cent moisture. Such seed corn will keep almost any where and has the strongest germination. Our seed corn this year has the highest vitality—the test from the Minnesota Experiment Station showing a germination of 100 per cent so that we are in a position to guarantee a germinating test of at least 96 per cent. Some of the kernels get injured in shelling which will however never reduce the germination more than 2 or 3 per cent. These heavy yielding varieties of southern Minnesota grown corn produce good results not only here in southern Minnesota but also in the best corn growing sections further south, which extensive trials in the state of Iowa and Illinois have fully proven. We should be pleased to mail sample ears of our seed corn for your inspection. We are in position to furnish car load quantities as we have put in quite a supply, seed corn being one of our important specialties.—*Farmer Seed & Nursery Company, Fairbault, Minn.*



THE DAKOTAS

The Arnold Bros. have installed two air dumps in their elevator at Berwick, N. D.

The Flaxton Farmers Elevator Company of Flaxton, N. D., has built an annex costing \$5,000.

J. P. Oleson's elevator at Tea, S. D., is being equipped with a Fairbanks 18-foot Scale and dump.

The elevators which J. A. Meyers leased at Crandon, S. D., have been closed by him. He has returned to Tulare.

A corn sheller of 2,500 bushels' capacity is to be installed by the Zap Farmers Co-operative Company of Zap, N. D., it is reported.

All steel truck lifts have been installed in the Hamberg, Sawyer, Max and Plaza, N. D., elevators of the Minnesota Elevator Company.

A manlift and cup belt has been installed and considerable painting and repairing done to the elevator of the Sinai Elevator Company of Sinai, S. D.

A Fairbanks Automatic Scale, an all-steel wagon and truck dump and an air blast carloader are to be installed by C. H. Townsend in his elevator at Presho, S. D.

J. G. Ryan of Highmore, S. D., contemplates the erection of a 20,000 or 25,000-bushel elevator this spring, thereby doubling his present capacity. Besides the annex he will install a feed plant, a new scale and auto truck dump.

The coal sheds and elevator of the Andrew Grain Company at Davenport, N. D., are being torn down. The St. Anthony Elevator there may also be torn down and a new structure erected. The elevator has for years been operated by H. M. Myhra & Son.

EASTERN

Four car dumps are to be installed in the new B. & O. Railroad Elevator at Baltimore, Md.

A new elevator has been completed at Concord, N. H., by the Merrimack County Farmers Agency.

A notice of voluntary dissolution has been filed by the Donelson Warehouse Corporation at Jamestown, N. J.

The Farmers Co-operative Union and the O. & P. Feed & Grain Company at Wellsboro, Pa., are being managed by W. S. Campbell.

The Western Maryland Railroad Company of Baltimore, Md., has closed its Port Covington Elevator to make some needed repairs.

The foundation for the new elevator at Oswego, N. Y., has been put in. James Stewart & Co., who have the contract, began the construction of the elevator on April 1.

The Federal Grain Corporation, Inc., has been incorporated at Bridgeport, Conn., capitalized at \$100,000. Harry Schwartz, Martha Molloy, and Helen Mullins are interested.

The contract for the erection of a new elevator for the Philadelphia & Reading Elevator at Philadelphia, Pa., has been let to the Fegles Construction Company of Minneapolis.

Capitalized at \$15,000,000, the Delaware Breakwater Terminal Corporation has been incorporated at Dover, Del., by H. R. Burton, Wm. R. Townsend and Frank S. Carter. The construction of a grain elevator and shipping facilities is planned.

To deal in grain, flour, feed, etc., the Cobb Mercantile Company has been incorporated at Portland, Maine. Capital stock is \$50,000 in preferred stock of \$100 par. John C. Cobb is president and treasurer; William Shepherd Linnell of Portland, clerk.

The new elevator at Philadelphia, Pa., known as the Bergdoll Elevator is to be ready for operation by April 1. The structure will take the place temporarily of the elevator of the Philadelphia Grain Elevator Company which burned down a few weeks ago.

The Spencer Construction Company has closed a contract with John W. Eshelman & Sons, of Lancaster, Pa., for the erection of a reinforced concrete elevator of 125,000 bushels' capacity at York, Pa. This elevator will be modern in every respect and will be an addition to the present structure.

The Elkland Roller Mills at Elkland, Pa., formerly conducted by J. W. Ryan, have been taken over by the recently organized Elkland Mill & Elevator Company which will conduct a general

wholesale and retail business in flour, feed and grain, and will manufacture a line of horse, dairy and poultry feeds. C. A. Smith will be in charge of the business. Associated with him in a financial way are W. S. Campbell and J. O. Pattison.

The Baltimore & Ohio Railroad Elevator at Locust Point, Baltimore, Md., is to be completed early this summer at a cost of \$10,000,000. Plans announced last April contemplated an expenditure of \$5,500,000. The elevators will have the largest storage capacity on the Atlantic Seaboard and are arranged in units to permit additions which will bring the total capacity to 9,000,000 bushels.

WESTERN

A grain office has been reopened at Moscow, Idaho, by J. C. Gibson, a grain dealer.

The capital stock of the Grange Warehouse Company of Roy, Wash., has been increased from \$2,500 to \$5,000.

The elevators of the Utah Cereal Feed Company of Ogden, Utah, have been bought by the Globe Grain & Milling Company.

The capital stock of the Oregon Grain Company operating at Newberg, Ore., has been increased from \$65,000 to \$100,000.

The Farmers Elevator Company has let the contract for the erection of a 30,000-bushel cribbed ironclad elevator at Yuma, Colo.

A 25,000-bushel elevator is to be built at Reserve, Mont., for the Farmers Elevator Company, and a grain cleaner and feed grinder have been installed.

Improvements are to be made to the Cascade, Mont., plant of the Cascade Milling & Elevator Company. Considerable machinery is to be installed.

The capacity of the Farmers Union Warehouse Company of Colton, Wash., is to be increased by the erection of 20 additional grain bins. H. B. Schlicht is manager of the company.

R. B. Hoffman, W. P. Shackelton, and A. Rehwooldt have filed articles of incorporation at San Francisco, Calif., as the American Milling & Warehouse Company. Its capital stock is \$100,000.

The State Harbor Board is building a cribbed warehouse at Islais Creek, San Francisco, Calif., with storage capacity of 1,000 tons bulk grain. The storage shed will permit the stacking of 20 tiers of sacks, with capacity of 8,000 tons sacked grain.

J. W. Elston & Sons, grain, feed and seed dealers of Chehalis, Wash., have sold their holdings to Jos. Schuss of the Chehalis Grain & Fuel Company. He has made plans for the erection of a new elevator, additional warehouse space and installation of new machinery. His old equipment property he sold to the Thompson Feed Company.

IOWA

J. F. Escher has sold his elevator at Parkersburg, Iowa, to Glenn Schuck.

H. G. Scott is succeeded at Buck Grove, Iowa, by the Buck Grove Elevator Company.

The Farmers Elevator Company is installing manlifts in its two elevators at Hawkeye, Iowa.

George T. Wagner is succeeded in the grain business at Storm Lake, Iowa, by Wagner & Wagner.

The Farmers Elevator Company of Stockton, Iowa, has installed a 50-horsepower Munson Mill.

J. C. Mawdsley is manager of the Farmers Co-operative Association at Irvington, Iowa, succeeding Bert A. North.

G. H. McCavel is succeeded as manager of the Dillon Farmers Elevator Company at Dillon, Iowa, by L. Rubenbauer.

The M. J. Hughes Grain business at Welton, Iowa, has been taken over by a new company with J. H. Phelps in charge.

A feed grinder with daily capacity of 300 bushels has been installed by the Haubrich Grain & Lumber Company of Mapleton, Iowa.

The elevator of the Farmers Co-operative Elevator Company at Abbott, Iowa, has been bought by Frank Ackerman who took possession March 15.

The elevator and grain business of A. F. Froning & Son at Webster City, Iowa, has been bought for \$10,000 by John R. Brown, principal owner of the Webster City Elevator Company. L. L. Froning retains the coal business. A. J. Froning has

been in the elevator and grain buying business for 26 years and leaves for Garrison, Iowa, where he has bought a farm and elevator. Possession is to be given Mr. Brown May 1.

A grain elevator at Lakonta, Iowa, has been built by the Farmers Co-operative Elevator Company at Stevens. The company will move the elevator to Stevens.

The Dougherty Grain Company has bought the grain elevator and other buildings at Dougherty, Iowa, formerly owned by the Independent Grain & Lumber Company.

Two elevators at Bouton, Iowa, recently bought by the Stockley Grain Company of Des Moines, have been purchased by Ray Tierney of Des Moines, representative there of the Armour Grain Company.

The Gifford Grain Company of Cedar Rapids, Iowa, has bought the elevator at Dike, Iowa, of the Independent Grain & Lumber Company of Mason City and is operating it, handling grain, coal and millfeeds.

Improvements have been made in the Farmers Co-operative Company's elevator at Roland, Iowa. The motor which drives the elevator from the ground floor has been placed in the cupola eliminating the need for about 300 feet of drive.

OHIO AND MICHIGAN

John W. Digs has been named as receiver of the Farmers Elevator at New Paris, Ohio.

John McDonald is managing the Fayette Grain Company's business at Washington Court House, Ohio.

The elevator of the Arcanum Equity Exchange at Arcanum, Ohio, has been taken over by the Arcanum Elevator Company.

The elevator at Big Springs, Ohio, has been bought by R. B. Coughill of Mt. Victory, Ohio. He will take over the management.

The interest of H. W. Anderson in P. M. Ashbrook & Co., at Alexandria, Ohio, has been sold by him. P. M. Ashbrook is now sole owner.

Ben Ireton has bought the property of the Haviland (Ohio) Elevator Company and is operating two elevators, one at Haviland and one at Tipton.

A site at Muntanna (Cloverdale p.o.), Ohio, has been bought by the Rabbe Bros. of Ft. Jennings, Ohio, and a grain elevator will be built there by them.

The elevator of the Canton Feed & Milling Company has been purchased by the Homeworth Supply Company of Homeworth, Ohio. The firm is capitalized at \$65,000 and will handle grain feed and implements. W. H. Stewart is manager.

H. G. Pollock of Middlepoint, Ohio, has bought the Lang Elevator of Venedocia, Ohio, owned by Charles and Otto Lang of Delphos, Ohio. He operates at Mermill and Paulding under the name of Bitner & Pollock, and at Cavette, under the name of Heist & Pollock. J. K. Pollock will be manager at Venedocia.

INDIANA

J. E. Gall of South Bend has taken over the elevator at Silver Lake, Ind.

The Windfall Grain Company has moved its offices from Elwood, Ill., to Windfall, Ind.

The capital stock of the Berne Grain & Hay Company of Berne, Ind., has been reduced to \$25,000.

H. C. Clark has succeeded Oscar Scott as manager of the Scircleville Grain Company of Scircleville, Ind.

H. C. Clark is succeeded as manager of the Monroeville Equity Exchange, Monroeville, Ind., by John Grabill.

The elevator of the New Waverly Elevator Company at New Waverly, Ind., which burned in October, has been rebuilt.

The capital stock of the Cartwright & Headington Elevator Company of Portland, Ind., has been decreased from \$50,000 to \$20,000.

A grain business has been started at Jefferson, (Frankfort p.o.) Ind., by Hans M. Unger, formerly of David Unger & Sons of Russiaville, Ind.

The elevator and warehouse at Decatur, Ind., have been leased by the Farmers Equity, purchasers of the old Adams County Equity Exchange.

Fifteen former stockholders in the old Equity Exchange purchased the property at a receivers' sale. The new owners will not operate the elevator themselves.

Thomas Kellar is now manager of the Mayer Grain Company's elevator at Huntington, Ind. He was formerly manager of the Churubusco, Ind., elevator.

Four farmers and business men of Cumberland, Ind., have bought the property of the Farmers Terminal Grain & Seed Company there and have organized as the Cumberland Elevator Company.

The elevator at Tefft, Ind., has been bought from the Fairchild Grain Company by Bernard E. Guild of the J. R. Guild Grain Company of Medaryville. Mr. Guild will continue as a member of his own firm, in Medaryville.

The F. Haldeman Elevator Company and the Akron Grain & Lumber Company of Akron, Ind., have consolidated and will be known as the Haldeman-Baum Company, under the management of George Baum and Frank Haldeman. A number of improvements will be made and the firm will deal in grain, feed, building material and coal.

MINNESOTA AND WISCONSIN

A. E. Anderson is to install a Howe Scale and Truck Dump in its elevator at Cottonwood, Minn.

N. Stadum has resigned as manager of the Farmers Grain & Lumber Company at Glyndon, Minn.

A combination truck and wagon dump is being installed in the J. S. Emerson Elevator at Mapleton, Minn.

Frank Shepard succeeds F. A. Strom as manager of the Commander Elevator Company at Stanton, Minn.

Rudolph Hubin is succeeded as manager of the Farmers Elevator Company of Westbrook, Minn., by W. H. George.

The capital stock of the Elmwood Lumber & Grain Company of Elmwood, Wis., has been increased to \$80,000.

Repairs have been made in the engine plant of the Itasca Elevator at Superior, Wis., and overhauling is being done.

A new oil engine has been installed by the Plainview Mill & Elevator Company of Plainview, Minn., replacing electricity.

A truck dump and scale has been bought by the Farmers Elevator Company at Hanley Falls, Minn., and will be installed by it.

The Cyrus Grain Company succeeds the business of L. T. Hoky at Cyrus, Minn. A. W. Johnson is manager of the grain company.

A combination truck and wagon dump has been installed in the elevator of the Spencer Elevator Company at Montevideo, Minn.

The Wabasha Flour Mill, of which W. B. Webb is manager, at Wabasha, Minn., has placed the contract for the erection of six concrete tanks.

Improvements are being made to the cleaning department of the Crookston Mill & Elevator Company of Crookston, Minn. A 60-inch cleaner has been bought.

Repairs are being made to the engine of the Itasca Elevator at Duluth, Minn., and a general overhauling is being made. The plant was closed during this time.

The Traverse Elevator Company of Traverse (St. Peter p.o.), Minn., of which John Westman is president, is contemplating the erection of a new elevator there.

Leonard J. Keefe is now with the Froedtert Grain & Malting Company of Milwaukee, Wis., as assistant to J. P. Hessburg, manager of the consignment department.

A new warehouse and an elevator costing about \$10,000 are to be built at Moorehead, Minn., for the Farmers Elevator Company. The work will start on or about April 1.

The elevator owned by the Glencoe Farmers Elevator Livestock & Produce Company at Glencoe, Minn., is to be conducted by the Farmers & Merchants Milling Company.

The Pierre Elevator at Oconto, Wis. has been bought by Wilfred Cota. Mr. Pierre will continue to do a brokerage business in grain and has retained his office near the elevator.

The elevator and warehouse of the Helmer Milling company at Fond du Lac, Wis., has been bought by the Boulay Bros. Company, operating a grain elevator and flour and feed business.

A new type registering Fairbanks Scale and dump have been installed by the Farmers Elevator Company of Delft, Minn. The company will cover its elevator this spring with new steel sheet roofing.

The Ladish Elevator at Milwaukee, Wis., is being conducted by the Kneisler Bros., under the name of the Bay Elevator. The elevator has a capacity of 800,000 bushels and is fully equipped with modern cleaning machinery, and electric

power. It has seven elevating legs with combined capacity of 30,000 bushels per hour, and an unloading capacity of 30 cars daily.

A branch yard has been opened at Aniwa, Wis., by the Builders Service Company of Birnamwood, Wis., dealers in grain, feed, hay, fuel and lumber.

Thomas Masterson has resigned as manager of the Lambertson (Minn.) Farmers Elevator Company and has bought the business, elevator, etc., of the Walnut Grove Grain Supply Company at Walnut Grove, Minn.

To conduct a grain, feed, flour and produce and farm supplies business, the Boscobel Farmers Exchange has been incorporated at Boscobel, Wis., capitalized at \$7,000. J. O. Moore, H. A. Rice and R. Bannen are the incorporators.

The plant of the Armour Grain Company at Oconomowoc, Wis., has been bought by Curtis Richardson, formerly manager of the Sussex (Wis.) Co-operative Company. He will operate as the Richardson Feed & Grain Company.

The Milwaukee, Wis., business of the Updike Grain Company, Omaha, Neb., has been taken over by the Froedtert Grain & Malting Company of Milwaukee. The Updike company has maintained a Milwaukee branch for seven or eight years. Leonard J. Keefe is local manager and will continue with the new operators.

To purchase and malt grain, the Fleischmann Malting Company has been incorporated at Watertown, Wis., capitalized at \$20,000. J. Fleischmann and others are interested. The company is an Ohio corporation. The firm recently acquired the large elevator and malt house of the American Grain & Malting Company at Watertown.

ILLINOIS

Grain, seeds and building material are to be handled at Albany, Ill., by Albany business men.

The contract has been awarded the Benson Farmers Co-operative Association of Benson, Ill., for a new elevator to cost \$19,500.

Wm. Lee is succeeded as manager of the Progressive Grain & Feed Company at Peters (P. O. Edwardsville), Ill., by W. Schmidt of Troy.

An addition is being built to the elevator of the Fernandes Grain Company of Middletown, Ill. It will add 12,000 bushels to the elevator's capacity.

J. C. South has sold his elevators and is out of the grain business. He at one time owned the South Grain, Lumber & Supply Company of Knoxville, Ill.

The Miesenhelder Bros., Inc., was incorporated at Palestine, Ill., capitalized at \$25,000. Frank R. Miesenhelder, Harry A. Miesenhelder and Kathryn Magill are interested.

The interest of A. J. Walters in Wrigley & Walters at Toulon, Ill., has been sold to J. H. Wrigley who will conduct the business as the Wrigley Grain & Lumber Company.

To deal in grain, fuel, flour, etc., the McElligott Company, Inc., has been incorporated at Des Plaines, Ill. Earle E. Ewins, John E. McElligott and Edw. B. Mueller are interested.

The contract of the New Boston Farmers Co-operative Association of New Boston, Ill., for a new elevator has been let. It will be 36x42 feet, 60 feet in height, with cupola extending 24 feet more.

The business of the Astoria Shipping Association at Astoria, Ill., has been taken over by the Farmers Elevator. The company will hereafter ship livestock in connection with their grain business.

Articles of incorporation have been filed at North Aurora, Ill., by the North Aurora Elevator Company in which W. H. Cowan, Hugh Cowan and George W. Schneider are interested. The firm is capitalized at \$28,000.

To conduct a grain, coal and fertilizer and fence post business, the Weedman Grain & Coal Company has been incorporated at Weedman, Ill. W. E. Mortland, F. L. Schneman, J. F. Saxton, D. J. Walter and Harry W. Reid are interested. The firm is capitalized at \$12,000.

The interests of Harrison, Ward & Co., at Fullerton (Farmer City, p.o.), De Witt, Birkbeck, Wapell and Craig have been transferred to C. F. Scholer of Bloomington and Harry Gring of Farmer City. In the future Harrison, Ward & Co. will concentrate their efforts in the interest of their properties at Keokuk, Iowa, Decatur and Peoria, Ill.

MISSOURI, KANSAS AND NEBRASKA

The Atlas Elevator at Belden, Neb., is to be closed down.

The Security Elevator at Rolla, Kan., is managed by C. O. Darnall.

The Farmers Mill & Elevator Company has sold its property at De Soto, Mo.

The Cummings Elevator at Ulysses, Neb., has been purchased by Melik Hiram.

The feed and flour business of E. A. Fassold at Perryville, Mo., has been sold to the Perry

County Co-operative Warehouse & Elevator Association.

The Nye-Schneider-Jenks Elevator at Chadron, Neb., has been bought by P. F. Smith.

The Wichita & Northwestern Railway is to build a new grain elevator at Kinsley, Kan.

Krotter & Fitzgerald have completed their new 100,000-bushel elevator at Imperial, Neb.

A small elevator is to be built at Mitchell, Neb., by Fred Petsch. The contract has been let.

A new plant is to be built next summer at Quitman, Mo., by the J. C. Ware Grain Company.

The elevator of the Farmers Elevator at Verdi, Kan., is to be rebuilt as soon as weather permits.

Capitalized at \$7,000, the Farmers Grain Company has been incorporated at Mound City, Kan.

Charles H. Fueston is no longer manager of the Farmers Grain & Supply Company at Dakota City, Neb.

An elevator is being built at Osborne, Kan., by Max Koessling, a grain dealer of Bloomington, Kan.

An elevator and flour mill are to be erected at St. Charles, Mo., for the St. Charles Milling Company.

The Crowell Elevator Company's property at Randolph, Neb., has been taken over by James Frost.

The Horton Grain Elevator at Horton, Kan., has been bought from Len Roberts of Sabetha by W. J. Love.

W. H. Starr is succeeded as manager of the Farmers Elevator Association at Overton, Neb., by E. Bailey.

T. C. Hart succeeds H. L. McKeown as manager of the Nye-Schneider-Jenks Company at Cadams, Neb.

J. B. Parriott has succeeded J. F. Heywood as manager of the Farmers Elevator Company, operating at Peru, Neb.

P. W. Barker has resigned as manager of the T. B. Hord Elevator at Cozad, Neb., and will return to Rising City, Neb.

Ed Miller has severed his connections with the Kelley Elevator at Muscotah, Kan., and is succeeded by Kilby Brun.

A. L. Ross is succeeded as manager of the Morgan County Elevator Company of Versailles, Mo., by George H. Carpenter.

Paul Phillips has given up his position with the Security Elevator Company at Hutchinson, Kan., and is in the oil business.

Frank Stire has bought the Hoerman Grain Elevator at Union Star, Mo. John Roberts will continue in charge as manager.

A new elevator is being built at Isabel, Kan., by the Red Star Milling Company who will have it ready in time for the next crop.

A. J. Norris is superintendent of the new Missouri Pacific Elevator at St. Louis, Mo., which is being operated by J. H. Teasdale & Co.

The elevator at Brewster, Kan., formerly owned by M. S. Mellor of Almena, Kan., has been bought by the Moser-Larrick Grain Company.

The interest of M. D. Babb in the Babb & Neyer, grain and feed dealers of Junction City, Kan., has been bought by his partner, Charles Neyer.

A 15,000-bushel elevator at Maxwell, Kan., has been bought from Paul Gano of Hutchinson by the Kansas Milling Company of Wichita, Kan.

The elevator and feed business of the Rea-Patterson Milling Company at Coffeyville, Kan., has been bought by Aldo Funston of Parsons, Kan.

The elevator of the W. R. Johnston Grain Company at Protection, Kan., has been bought by the Southwestern Grain Company of Hutchinson, Kan.

The Garden City Elevator at Garden City, Kan., has been bought by the Garden City Co-operative Equity Exchange. Possession is to be given June 1.

The grain elevator and property of the Wooddell Grain Company at Nickerson, Kan., has been bought by the Farmers Co-operative Elevator Company.

The Farmers Elevator Company, operating an elevator, coal shed, flour house and fixtures at Henderson, Neb., has been dissolved and the property is offered for sale.

The Armour Grain Company is remodeling the workhouse of elevator "A" at Kansas City, Mo. Cleaning and handling capacity will be increased and up-to-date equipment installed.

The old Connet Elevator at Axtell, Kan., was sold at public auction and August Kaemer of Seneca will raze it and move it to his farm where he will use the lumber for sheds and outbuildings.

The Kansas Central Grain Elevator at Leavenworth, Kan., has been bought by the Kansas Co-operative Wheat Marketing Association, which is a merger of the Kansas Wheat Growers Association and the Kansas Farmers Union, and will be put into operation by them May 1. The elevator

has a capacity of 450,000 bushels and is equipped with modern machinery. It was formerly owned by the Moore-Lawless Grain Company and is valued at \$150,000; price paid by purchasers was \$80,000.

To deal in grain, hay and feed, the P. M. Barton Company has been incorporated at Wolf Island, Mo., capitalized at \$60,000. P. M. Barton, Thomas B. Williams, J. L. Rynnerson and B. P. Rynnerson are interested.

The interest of B. E. Hanlon in the Crawford Grain Company at Crawford, Neb., has been bought by his partner, James H. Nestor, and the business will hereafter be conducted as the J. H. Nestor Feed Store.

The dock conveyor at the new 1,750,000-bushel elevator at St. Louis, Mo., of the Missouri Pacific Railroad is to be equipped with a marine leg so that grain can be taken from barges and boats as well as loaded into them.

The Omaha, (Neb.) Milling Company has added a reinforced concrete elevator, consisting of seven concrete tanks, with capacity of 150,000 bushels and working house. The Burrell Engineering & Construction Company did the work.

Business operations have been stopped by the Smith Brokerage Company of Kansas City, Mo., of which Robert Y. Smith was the head. Mr. Smith and his associates has bought a 50,000-bushel elevator at Norfolk, Neb., and organized the Norfolk Grain Corporation.

CANADA

A grain elevator may be built at Prince Rupert, B. C., by Kerr, Gifford & Co., Ltd.

Capitalized at \$15,000, the Home Grain Company has been incorporated at Port Arthur, Ont.

The Mutual Elevator Company of Fort William, Ont., has let the contract for the erection of a 500,000-bushel elevator.

The contract has been let by the Government for the erection of a grain elevator at Edmonton, Alta. The terms of the contract call for an elevator of 2,500,000 bushels to be completed by September 15.

The United Grain Growers has suspended negotiations for the erection of a terminal elevator at Vancouver, B. C. J. W. Murray, assistant general manager, said there would be no decision one way or the other for at least nine months.

A controlling interest in the Victoria Grain Company of Vancouver, B. C., has been bought by the Spillers Milling & Associated Industries. The company will erect a 2,000,000-bushel elevator there, which will be ready for operation by September 1.

The Dominion Grain Research Laboratory at Winnipeg, Ont., has been closed. It was established 11 years ago and since then has been carrying on research work but for reasons of economy it was deemed wise to close it. Dr. Fred Buchard was in charge.

The Dominion Government plans to invite tenders for the construction of a Government grain elevator at Alberta. It will be of reinforced concrete and fully equipped with necessary machinery and electric drives. Its capacity is to be 2,300,000 bushels and will cost \$1,250,000.

Negotiations are under way between the owners of the Davison & Smith Elevator at Port Arthur, Ont., and the McCabe Grain interests of Winnipeg for the purchase of the plant. The elevator is under lease to the Smith-Murphy Company which has let the contract for a new elevator.

The Saskatchewan Co-operative Elevator Company is to build two complete conveyor systems with bridges and structural steel galleries at its terminal at Current River, near Port Arthur, Ont., at a cost of \$60,000. The additional equipment is necessary to take care of the extremely heavy cleaning operations the elevator is called upon to do.

The British-Oriental Elevator, located at Vancouver, B. C., is expected to be ready for operation at this time. K. Blatchford, mayor of Edmonton, is president of the British-Oriental Grain Elevator Company, which will take over the elevator officially as soon as ready, and the elevator lighter, the Blatchford, will be fitted and ready at about the same time that the elevator is taken over.

SOUTHERN AND SOUTHWESTERN

A grain and hay business is to be conducted at New Bern, N. C., by W. K. Slyron.

The plant of Fred Varner, grain elevator owner at Grandfield, Okla., has been sold to a co-operative concern.

Peter Stine, A. T. Bernard, Phil L. Brown have incorporated at Cherokee, Okla., as the Farmers Elevator Company. The firm is capitalized at \$20,000.

Raymond Sheldon is now with the Great West Mill & Elevator Company of Amarillo, Texas, with headquarters at Oklahoma City, Okla. He is secre-

tary of the Oklahoma City Grain Exchange and was formerly secretary of the Cozart Grain Company.

The Farmers Grain & Warehouse Company has been incorporated at Farwell, Texas, by Lee H. Dudderth, J. O. Ford and others.

Chas. Maeler has opened a grain and cotton exchange at Nacogdoches, Texas, in the Basin Hardeman Building. Mr. Maeler comes from Jacksonville.

Frank Winters, M. E. Winters and R. C. Moss have incorporated at Oklahoma City, Okla., as the Winters Grain Company. The firm is capitalized at \$10,000.

A grain elevator of from 15,000 to 25,000 bushels' capacity is to be built at Dalhart, Texas, for the W. S. Strader Grain Company, who operate at Amarillo, Texas.

The interest of C. E. Parks in the C. E. Parks Grain Company, Lubbock, Texas, has been purchased by S. E. Cone, who will operate as the S. E. Cone Grain & Seed Company.

The name of the Barnes-Harrell Distributing Company of Tarboro, N. C., has been changed to the Southern Grain Company and the capital stock of the firm reduced from \$100,000 to \$10,000.

A store has been opened at Brinkley, Ark., by the Short-Fisher Company which is to deal in grain and feed, both wholesale and retail. The company is composed of R. E. Short and N. W. Fisher.

The Equity Union Exchange of Texline, Texas, expects to install a motor to operate an elevator of two legs and also two cleaners, replacing the 15-horsepower Fairbanks Engine which had been in use.

To conduct a wholesale and retail grain business, the T. Ross Alexander Company, Inc., has been incorporated at Statesville, N. C. T. Ross Alexander, E. E. Alexander and H. L. Gilbert are interested.

Capitalized at \$25,000, the Decatur Mill & Elevator Company has been incorporated at Albany, Ala. The building and machinery of the Brandon Elevator Company at Decatur, Ala., is now the property of the new concern. The company also

owns the mill formerly the property of the Lyle-Taylor Company. C. W. Knight is president and treasurer; F. E. Taylor, vice-president; and R. H. Jarvis, secretary.

John H. Mitchell is president and James T. Maxey, secretary-treasurer of the Planters Warehouse Company of Maryville, Tenn., which was organized recently. The company will build a new house this spring.

A line of grain elevators and warehouses is to be conducted by William J. Bauer, Jr., J. W. Horton and G. F. Dryden of Clarkwood, Texas, under the name of Horton & Bauer. They have organized, capitalized at \$20,000.

A grain elevator is being erected at Longview, Texas, by the Heid Bros. Grain Company of El Paso. The Heid Bros. have plants at El Paso, Eastland, Ranger, and Breckenridge. They will erect an elevator at Fort Stockton.

The Statesville Flour Mills of Statesville, N. C., has awarded the contract to the Spencer Construction Company for the erection of 13 elevator tanks of reinforced concrete construction and with capacity of 150,000 bushels, which will increase its storage capacity to 250,000 bushels.

A public storage is to be conducted by Frank J. Gillespie of the Gillespie Grain Company of Memphis, Tenn., in addition to handling grain, flour and feed. For several months, since his plant burned, Mr. Gillespie has been associated with E. E. Anderson, grain dealers.

The Liberty Mills of San Antonio, Texas, has awarded the contract to the Jones-Hettelsater Construction Company for the erection of a 250,000-bushel elevator and headhouse. The headhouse will be 137 feet high and the eight tanks will be 80 feet high with interstice bins. The head house will house the tempering bins and also the milling bins. Part of the equipment will include a 2,000-bushel hopper scale, three large elevator legs, two Carter Disc Separators, automatic scales for weighing wheat into the mill, and Eureka Receiving Separators. The total capacity of the company when these tanks are completed, will be 400,000 bushels. The mill has a daily capacity of 600 barrels.

OBITUARY

AUGENBAUGH.—Herbert Augenbaugh died following an operation, aged 46 years. He was grain buyer at the Farmers Elevator, Sentinel Butte, N. D.

BIDDICK.—Ernest Biddick committed suicide on March 26. He was head of Ernest Biddick & Co., grain and flour dealers of Milwaukee, Wis., and had recently suffered the loss of his plant by fire. Financial despondency is believed to have caused him to take his life. His widow and four small children survive him.

BORGERDING.—Miss Katherine Borgerding, manager of the Borgerding Grain Company of New Albany, Ind., died recently.

BOTTERELL.—John E. Botterell of the grain firm of Baird & Botterell of Winnipeg died recently. He was a well known member of the Chicago Board of Trade and the Winnipeg Grain Exchange and was president of the latter in 1919. He had been active in the grain trade for 13 years.

CHURCH.—Charles P. Church, one of the oldest grain exporters in the Pacific Northwest, met with his death while trying to rescue a friend who was caught in a burning house. He was a member of the firm of Sigson, Church & Co., doing an export business from 1879 to 1885. He had not been active in business for a number of years, and resided near Portland, Ore.

FENDER.—W. J. Fender, a well known mill furnisher, died at Williamsville, N. Y., after two years illness. Previous to his last illness he was associated with the S. Howes Company at Silver Creek, N. Y.

GIBBONS.—John T. Gibbons, formerly head of the J. T. Gibbons Grain Company of New Orleans, La., died, aged 86 years. He was a pioneer in the grain business in New Orleans starting in business there over 50 years ago and was actively in the work up to a week before his death. His three sons and three daughters survive him. Mr. Gibbons was the brother of Cardinal Gibbons of Baltimore.

HOLLINGER.—Frank C. Hollinger died at Chicago, Ill., on April 6. He was manager of the Chicago office of Logan & Bryan.

HARRISON.—F. Harrison, an employe of the Scholl Grain Company of Cincinnati, Ohio, was suffocated when he fell into a bin filled with shifting corn.

KIRKPATRICK.—Gen. E. W. Kirkpatrick died at

Rincon, N. M., where he had gone on business. He was a director in the Collin County Mill & Elevator Company and in the Burrus Milling Company of Fort Worth, Texas. Pneumonia caused his death.

KULP.—Aaron K. Kulp, a retired grain and feed merchant of Pottstown, Pa., died on April 1. He is survived by his three sons and four daughters.

LUSCHER.—Wm. F. Luscher died on March 15. He was proprietor of the Fitchburg Grain Company of Fitchburg, Mass. He is survived by his widow, one son and two daughters.

MCCOLL.—Donald D. McColl died, aged 66 years. He was formerly operator of a grain elevator at Perry, Iowa.

McEVOY.—Martin McEvoy died after an illness of three days. He was 91 years old and for over 47 years had been an employe of the New Orleans Board of Trade.

McNAIR.—John H. McNair died on March 19 following a long period of poor health. He was president of the Halstead Milling & Elevator Company of Kansas City, Mo. For more than 40 years he had been active in the milling business. His widow and one daughter survive him.

MEYER.—C. W. Meyer died, aged 70 years, at Belton, Texas. He was engaged in the wholesale and retail grain business for over 40 years.

MINTER.—Claudius W. Minter died at Kansas City, Mo., on March 31. He was one of the founders of the Advance Grain Elevator Company.

MOORE.—Richard Moore died aged 74 years. He was formerly operator of a flour and feed business at Welland, Ont., under the firm name of Taylor & Moore. He retired a number of years ago.

MULHALL.—Harold T. Mulhall died on March 16 at New York City. He was formerly associated with Goffe & Carkener of Kansas City.

NIXON.—Alfred A. Nixon died recently at Omaha, Neb. He was in the wholesale grain and hay business in South Omaha for 35 years.

PEDRICK.—George R. Pedrick, senior member of the wholesale seed growing firm of Geo. R. Pedrick & Son of Pedricktown, N. J., died on February 11, aged 84 years.

O'BRIEN.—J. D. O'Brien died on March 22 at San Francisco, Calif. He had been connected with

the grain trade in Winnipeg for a long time and before leaving there 10 years ago was a member of O'Brien & Martin. At the time of his death he was with McDonnell & Co. of San Francisco.

RUDY.—Frank Rudy died from heart trouble at his home in Paris, Ill. He was of the firm of Huston & Rudy, one of the prominent grain firms in his part of the state.

RYAN.—Daniel T. Ryan, well known grain and flour salvage expert, died at Buffalo, N. Y.

SHARKEY.—John F. Sharkey, formerly a director of J. Breck & Sons Corporation of Boston, Mass., of which he was manager of the seed department, died at Cambridge, Mass. He had been ill and inactive in business since 1911.

STEUER.—John G. Steuer, manager on the floor of the Toledo Produce Exchange of the business of Jackson Bros. & Co., Chicago, Ill., died on March 29, aged 50 years.

SHARPLESS.—Thomas K. Sharpless died at White Haven, Pa., after an illness lasting nearly a year. He was of the flour, feed and grain firm of Brey & Sharpless, Bourse Building, Philadelphia, Pa., and president and general manager of the Columbia Flour Milling Company of Columbia, Pa.

He was taken ill in May, 1923, and went to White Haven shortly before Christmas in an effort to recuperate. His widow and three children survive him.

SHIELDS.—John F. Shields died on March 24. He was a pioneer grain dealer of Chetopa, Kan.

SIEMERS.—George J. Siemers died on March 24, aged 44 years. He was for the past 14 years manager of the New York office of the Albert Dickinson Company. His widow and son survive him.

WAGNER.—Alfred J. Wagner, a pioneer grain merchant of Minneapolis, Minn., died at his home in Santa Monica, Calif., where he had resided for three years. He entered the grain business with his father, the late D. R. Wagner, after graduating from Princeton, and was active in that business until three years ago. His widow, two sons survive him.

WEED.—Edward A. Weed died on March 22 at Westfield, N. J. He was for years with the New York Produce Exchange and lately connected with the Uhlman Grain Company.

WILSON.—A. J. Wilson died on March 30, at Clay Center, Kan.

the Oatman & Montfort Company, seed merchants. The value of the building was set at \$100,000, and the contents, seeds, etc., at \$25,000.

Windsor, N. D.—Fire on March 13 destroyed the elevator of the Powers Elevator Company. The building, valued at \$10,000, was covered by insurance.

Vining, Minn.—Fire on March 18 destroyed the East End Elevator owned by C. Steinkopp of Detroit, Minn. The loss is partly covered by insurance.

Lawrenceburg, Tenn.—Fire damaged to the extent of \$1,000, the feed and flour store of G. T. Stephens. The loss was partly covered by insurance.

Leavenworth, Kan.—Fire destroyed the machine shop and other buildings of the Great Western Manufacturing Company on April 3 with a loss of \$150,000.

Deshler, Ohio.—A loss of \$25,000 by fire was reported on the Deshler Farmers Elevator Company on March 30. The loss is covered partly by insurance. On April 7, another elevator at this place burned.

Denver, Colo.—A partial loss occurred on the elevator of the T. D. Phelps Grain Company on February 25. Fire supposedly started from spontaneous combustion.

Fort Ripley (near Brainerd), Minn.—Fire on March 28 destroyed the two small elevators here owned by the Farmers Shipping Association and the Johnson Bros.

Lawndale (Saginaw p.o.), Mich.—The Central Hay & Grain Company suffered a total loss by fire in their elevator on March 18. Cause was given as stove or exhaust pipe.

Chicago, Ill.—Fire damaged to the extent of between \$4,000 and \$5,000, the Belt Line Elevator of the Rosenbaum Bros. on March 12. The blaze was confined to the drier.

Chattanooga, Tenn.—Fire damaged with a loss of \$50,000, the warehouse of the Talley Feed & Milling Company of Chattanooga, Tenn. The fire also destroyed a power line.

Hastings, Ont.—The grain elevator and coal sheds of H. M. Foulds & Sons burned. Considerable grain, flour and feed was destroyed. The damage was only partly covered by insurance.

Vale, Ore.—The plant and storage warehouse of the Vale Grain & Feed Company was damaged with a loss of \$10,000; insurance, \$6,000. The company will resume operations in a new location immediately.

Rochester, Minn.—Fire destroyed the elevator of the Rochester Grain Company and 800 bushels of grain. Albert Moehnke and Wm. Pries are owners and managers. The loss amounted to \$10,000; insurance, \$4,500.

Buffalo, N. Y.—Fire damaged one of the buildings at the plant of the Clover Leaf Milling Company on March 20 with a loss of \$4,000. The frame shed in which were stored 800 tons oat clips and brewers grains was destroyed. The loss is covered by insurance.

FIRES—CASUALTIES

Ward, S. D.—Fire destroyed the Davenport Elevator on April 4.

Sioux City, Iowa.—The H. C. Schlosser Feed Store was destroyed by fire.

Lahoma, Okla.—The roof of the elevator of the Enid Milling Company was damaged.

Archer, Kan.—The elevator of the H. B. Wheaton Grain Company was slightly damaged.

Billings, Okla.—The elevator of the Billings Grain & Supply Company was slightly damaged.

Glasco, Kan.—The roof of the C. E. Robinson Elevator Company's plant was slightly damaged.

Frederick, Md.—The Frederick County Farmers Exchange sustained a total loss by fire on March 28.

Frederick (Huffine Switch), Okla.—The elevator of the Huffine Grain Company was slightly damaged.

Chetopa, Kan.—The roof of the cupola of the Chetopa Grain Company's elevator was slightly damaged.

Palco, Kan.—Part of the iron siding on the elevator of the Western Star Mill Company was blown off.

Pomona, Calif.—Fire partially destroyed the warehouse of E. Hinman & Son, the latter part of March.

Morganville, Kan.—The C. M. Alspach Grain Company suffered a total loss on its elevator on March 23.

Milwaukee, Wis.—Fire damaged slightly the plant of the Froedtert Grain & Malting Company of this city.

Erie, Kan.—The cupola roof of the elevator of the Erie Farmers Union Co-operative Association was damaged by a wind storm.

St. James, Minn.—Fire destroyed the grain elevator of the Hubbard & Palmer Company with a loss of \$10,000.

Lawndale (mail Freeland), Mich.—On March 18 fire damaged the elevator of the Central Hay & Grain Company.

San Francisco, Calif.—Fire damaged the property of the A. W. Scott Hay & Grain Company with a loss of \$50,000.

Newport, Wash.—The hay warehouse of L. S. Feden and 85 tons hay were burned. The hay was insured for \$1,500.

Madrid, Iowa.—Soderlund Bros. had a small loss on their elevator within the last month. Cause was given as incendiarism.

Troy, Ala.—The feed mill of the Farmers Co-operative Warehouse & Grain Company was destroyed by fire on March 11.

Le Sueur Center, Minn.—The grain elevator of A. O. Radke was destroyed with a loss of \$12,000. He will rebuild the elevator.

Sweetwater, Neb.—Fire destroyed the Highland Grain Company's elevator. Locomotive sparks is said to have caused the blaze.

Pocasset, Okla.—The roof of the elevator of the Pocasset Grain & Elevator Company was damaged and doors and track blown off during a windstorm.

Philadelphia, Pa.—Fire destroyed the elevator known as the Twentieth Street Elevator operated by the Philadelphia Grain Elevator Company with a loss of \$300,000. The structure was of frame

and had a capacity of 300,000 bushels, although only about 84,000 bushels were in storage at the time.

Chelsea, Mass.—Fire on March 6 damaged the hay and grain warehouse of the Krentzman Bros., with a loss amounting to \$15,000.

Atmore, Ala.—Fire damaged the building of the Atmore Mill & Elevator Company owned by H. M. Currie. The loss amounted to \$25,000.

Honey Grove, Texas.—Several hundred bushels of corn were destroyed with the storage house of J. A. & F. W. Underwood at Honey Grove.

Fairmount, Ill.—A fire, originating in an electric motor, occurred in the elevator of the Fairmount Grain & Elevator Company on February 27.

Louisville, Ky.—The three buildings comprising the Louisville branch of the Early & Daniel Company were destroyed by fire of unknown origin.

Machias, N. Y.—Fire destroyed the feed mill of John M. Pierce. The feed in store and machinery were a total loss, partly covered by insurance.

Charlesville (p. o. Tintah), Minn.—The elevator here with 9,000 bushels grain burned. Sparks from a freight engine are believed to have caused the fire.

Cleveland, Ohio.—Fire broke out in the elevator formerly owned by the Union Elevator Company, which spread to adjoining property causing a loss of \$250,000. The elevator was sold a year ago to

TRANSPORTATION

SUSPENSION OF RATES

In I. and S. No. 2069 schedules as published in No. 7 to Atchison, Topeka & Santa Fe Railway I. C. C. No. 9528 have been suspended by the Commission from March 18 to July 16. The proposal of the suspended schedules is to assess a charge of \$3.60 per car for switching of carload traffic from team inspection to hold tracks of the above named carrier, in Kansas City, Mo., on inbound shipments that have been accepted by the consignee and are later ordered switched to another road for rebilling as a new shipment.

WESTERN CANADIAN RATES

A very striking series of speeches have been made in the Canadian Parliament of late relative to the rates in effect, especially with reference to their effect on the producer of grain, who finds that rates preclude sending his grain via desirable western routes.

Part of the discussion has naturally centered around the matter of the operation of the Canadian National and its contract with Governmental administration. Some of the blame is laid to duplication of service in certain territory, such as that north of Lake Superior.

REFUND OF OVERCHARGE FOUND

Examiner Myron Witters has given a report on No. 15209, Victor Milling Company vs. Missouri Pacific, et al., in which he states the Commission

should find that charges on wheat from Kansas City to Memphis, Hot Springs, Ark., and Deport, Tex., with transit accorded at Leavenworth, Kan., and Marshall, Mo., were applicable. He also found that a similar shipment from Kansas City to Omaha, with transit at Leavenworth and Marshall, was overcharged.

It had been the allegation of the claim that the rates were unjust and discriminatory to the extent that they exceeded those from Kansas City to the respective destinations. The examiner said that refund of overcharges should be directed and complaint dismissed.

MIDWEST REGIONAL ADVISORY BOARD

The American Railway Association has been instrumental in forming the Midwest Regional Advisory Board, and E. S. Wagner, of the Millers National Federation has been elected chairman of the Grain Products Committee, with Ralph M. Field as alternate chairman.

The purpose of the advisory board is to analyze transportation needs in each territory, and anticipate car requirements, and to promote car and operating efficiency in handling of transportation matters. It is also the intention to establish better understanding of the railroads of needs of the shippers, to promote intelligent cooperation in handling seasonal requirements, and to give the shipping public a voice in the activities of the Car Service Division of the American Railway Association on all matters of mutual concern.

HAY, STRAW AND FEED

IMPORTATION OF CANADIAN HAY

In spite of the duty on hay, amounting to \$4 a ton of 2,200 pounds, regardless of price or quality, Pittsburgh reports indicate that 200 to 300 tons of Canadian hay are distributed in that territory each month.

TIME TO CUT TIMOTHY AND CLOVER

The time for cutting is important in the production of No. 1 hay, according to recommendation made by the Department of Agriculture regarding Federal hay grades. Neither Timothy nor Clover should be cut later than full bloom to meet the requirements of U. S. No. 1 grade, and mixtures of Timothy and Clover to meet requirements should be cut when the Clover is in full bloom or not later than when half the Clover heads have begun to turn brown.

ADDITIONAL FEDERAL HAY INSPECTORS

The close of the first inspectors' school since the Federal grades were revised, resulted in licensing four new hay inspectors, including R. M. Batson, 615 Stone's Levee, Cleveland, Ohio; M. J. Kendrick, 211 Chamber of Commerce, Birmingham, Ala.; C. L. Shiley, 1213 National Bank of Commerce, Norfolk, Va.; and B. B. Jones, Madison, Wis. These are in addition to the men already qualified at Chicago, New York, Philadelphia, Auburn, N. Y., and Richmond, Va.

HAY RATE CASE DISMISSED

Examiner F. E. Early has recommended that the rate of 46.5 cents charged on 16 carloads of Alfalfa hay, shipped between January 1 and February 15, 1922, from Keenesburg and Hudson, Colo., to St. Louis, be found not unreasonable. The complaint, by National Hay & Milling Company, had alleged that it was unreasonable and unduly prejudicial to the extent it exceeded 40.5 cents, the rate in effect from Colorado points, and in violation of section 4, the long-and-short haul clause.

FEEDING-PROBLEM SERVICE

The feeding-problem service, now conducted in various states to improve methods of feeding farm livestock, is being used by an increasing number of farmers having diverse interests, according to records of the United States Department of Agriculture. Problems on balanced rations for beef and dairy cattle, swine, poultry, and other livestock are submitted to state livestock specialists for analysis and recommendation. Each inquirer is then informed of the best practice in his particular circumstances.

HAY GRADING IN THE ARMY

The Army Veterinary School at Walter Reed Hospital, Washington, has instituted a four weeks' course in hay grading and a number of officers are taking instruction in this with the bureau officers. As all hay delivered to the army on contract is subject to approval by the veterinary officers, the work is likely to have a decidedly constructive influence. It is believed that this will assist in removing the cause for much criticism in the past due to difference between army requirements and standard commercial practices.

FORAGE POISONING DUE TO MOLDY SWEET CLOVER

Experiments recently conducted indicate that forage poisoning caused by damaged Sweet Clover is a serious condition, of cattle especially, that has only lately been recognized. The disease is produced by a toxic substance which is present in moldy Sweet Clover, and the effect is on the vital organs, causing delayed coagulation and hemorrhages. The death rate is roughly estimated among such animals at 79.4 per cent, young cattle being most susceptible. Dr. Frank Schofield of the Ontario Veterinary College has led the investigation.

GROWING ALFALFA FOR HAY

Recent evidence says a report of the University of Nebraska Agricultural College, shows that growing Alfalfa in rows in dry regions is seldom practical. They go on to say that experience indicates that harrowing a field of Alfalfa ordinarily does not increase the yield, nor does it prolong the life of the stand to any noticeable extent. It is recommended that the new growth be started at the crown and lower parts of the old stems.

"Cutting the Alfalfa at just the time the new growth starts gives the plants the best chance to compete against weeds of all kinds and also keeps

the ground shaded the greatest percentage of the time," says the college. "By delaying the cutting of the crop until it is nearly in full bloom, however, a larger yield will be obtained over a period of years, and the life of the stand prolonged."

STRAW PULP FOR PAPER MANUFACTURE

A shipment of more than 200 bales of wheat, oat and flax straw was recently made from Winnipeg to Havre, France, for use there in the manufacture by the Devains Process Company of Grenoble into straw pulp. The pulp, it is said, will be shipped back to Winnipeg. If it is shown that the straw produces a good quality of straw pulp, which is used in the manufacture of high grades of paper, it will result in the building of several straw-pulp mills at this Province with a production capacity of 50 to 100 tons of straw pulp daily throughout the entire year.

REMEDY FOR CONGESTION AT CHICAGO

BY JOHN H. DEVLIN

Relative to complaints about delays in receiving returns on shipments of hay from the Chicago market, it is true that there are grounds for complaint on the part of the shippers as there is considerable delay in getting returns on shipments of hay to the Chicago market. This, however, is not the fault of the commission men; it is the fault of the system of handling hay on this market. Practically all of the railroads entering Chicago have their hay yards in the downtown district. The cars are first placed in these yards



for inspection and sale, at least 95 per cent of the cars are switched from these yards to other yards in the outlying districts for unloading, it is here where the delay occurs. The remedy for this is to have the plugging system of inspection installed on the Chicago market. This would not only mean quicker returns to the shipper, it would mean releasing cars to the railroads at from a week to 10 days earlier than is the case now. The commission merchants of Chicago have endeavored to bring this about for a number of years but have been unsuccessful for the simple reason that they could not get the co-operation of the railroads. The Government under the Agricultural Department, we understand, is now working to bring about this system of handling hay and we hope that they may be successful. Once the plugging system of inspection is installed here, we believe that most of the evils now complained of by the country shippers will disappear.

SUDAN GRASS AS AN EMERGENCY HAY CROP

As a hay crop Sudan Grass has been used in this country since 1909, and recent experiments have demonstrated its adaptability as an emergency hay crop throughout a large part of the country. It belongs to the sorghum family and is relished by cattle on account of its sweet flavor. Its ability to withstand long periods of drouth without being seriously affected has done much to recommend it, and it is adapted to the sandier soils which are inclined to dry out earlier in the season.

However, it yields maximum returns in a rich clay loam; and even in the poorer soils it makes a better growth than most hay plants. It will give poor results in cold wet soils.

Some excellent data has been compiled by the University of Wisconsin on growing Sudan Grass seed, and the growing of it as a hay crop.

HAY ACTIVITIES IN KANSAS CITY

BY B. S. BROWN

A report received from one of the hay companies in Kansas City states that 222 cars of hay were received in the city on April 7, 125 of which were Alfalfa. The market declined \$1 a ton on both Alfalfa and Prairie hay.

The demand for Prairie hay is very limited and only one-half the receipts were sold on April 7. Indications are that the Prairie market will see another decline soon. The market closed easy at the following quotations: Number 1 Prairie hay, \$14-\$15; No. 2, \$12-\$13.50; No. 3, \$8.50 to \$11.50.

All good, sound Alfalfa closed steady at the decline of \$1 a ton, but damaged and extremely low grades of Alfalfa were very dull and hard to move so late in the season. Alfalfa closed at the following quotations: Select dairy hay at \$29 to \$31;

choice hay \$27.50 to \$28.50; No. 1, \$26 to \$27; standard, \$21 to \$25.50; No. 2, \$15.50 to \$20.50; No. 3, 10 to \$15.

There were 40 cars of Timothy on the market, with all the better grades in active demand. No. 1 sold at \$20.50, Standard \$19.50 to \$20, No. 2, \$18 to \$19, No. 3, \$14.50 to \$17.50. Indications are that the Timothy market will remain firm at the present price, owing to the small amount of good Timothy hay left in the country.

There is no straw riding on the market but nominal quotations are from \$8 to \$8.50 per ton.

PLEA FOR MEMBERSHIP OF FEED ASSOCIATION

The United States Feed Distributors Association is making a plea for securing of new applications for membership. Through its secretary, Charles G. Wehmann, the Association has called attention to "the imperative need of all reputable members of the feed trade getting together for mutual protection." It is pointed out that the association has been the means in the past of stabilizing conditions and fostering a high standard among the membership in methods and fulfilling obligations.

ENTIRE TRAIN USED IN FEED SHIPMENT

One of the largest shipments of its kind ever made was an entire train, consisting of 45 carloads, 25 tons to the car, of animal feeds. This was shipped recently by the Grain Belt Mills Company, of St. Joseph, Mo., on the Burlington Road, to dealers in Alabama, Georgia, Mississippi, Tennessee, North Carolina and Florida. The train was operated on a special schedule, arrangements being made in advance for the telegraphic reports of its progress through various points to ultimate destination in North Carolina.

VALUE OF ALFALFA IN DAIRY FEEDING

A farmer in Cortland County, N. Y., has during the past winter demonstrated very convincingly, though unwittingly, the value of Alfalfa as a dairy feed. During the early part of the winter, his cows were fed good Alfalfa hay and a 20 per cent protein grain mixture. He had no silo. The middle of January, the Alfalfa in the mow from which he was feeding gave out and he started feeding Timothy. Immediately the milk production per cow began to decline at a rate of three pounds per day. Even when grain was added to the diet the decline was not checked. Not until Alfalfa was again reached in the mow did he succeed in getting his herd back to normal production.

In commenting on this demonstration, the State College of Agriculture, Ithaca, N. Y., said that if more dairymen realized how the feeding of legumes decreased the cost there would be an even more noticeable increase in the acreage of Alfalfa.

INCREASE IN DAIRY FEEDING

It has been noticed for some time that dairy farmers in some districts were feeding more than formerly. There has been a reason, for some of them have discovered that there is money in proper feeding and loss in improper feeding. The seriousness and extent of improper feeding was shown by a recent survey of a leading dairy district by a well known Wisconsin dairy expert. Out of the first 14 herds visited he found but two receiving all the feed they were capable of handling at a profit. Innumerable other herds showed clearly that they were being underfed. If half of those cows were sold to the butcher and the other half given the feed now being used by the first half, milk production would be equal to the present volume and expense of handling fewer cows would be greatly reduced. The survey holds that if prices of butterfat and milk were doubled, many of these herds would not yield their owners a profit. Farmers who complained that there was no money in dairying were those who kept down their feed bill. They would make a scrub cow out of a blooded animal in short order. Hundreds of prosperous dairy farmers were found. Every one of them knew the vital importance of a well balanced ration.

RIPER AGE FOR OLD DOBBIN

Proper feeding and better care is giving the work horse a longer lease on life. Some horsemen declare that Old Dobbin's life is being extended from one to two years longer than was the case in the old days.

Thousands of farmers as well as city men who formerly ignored the simple rules of proper care are now extremely careful that Old Dobbin gets sufficient rations of the correct feed during the heavy work season.

Feedingstuffs men have been largely responsible. In many districts they have taken leadership in a move to bring before owners of horses and dairy cattle the value of well balanced rations and proper care.

Today the common work-horse, say equine associations, receives almost as much attention as the high hurdler of the horse show, at least so far as ration and housing are concerned. One present

day custom now well established is springtime clipping. During the next few weeks millions of horses will be barbered.

"It is inhuman to work, in warm weather, a horse wearing a heavy coat of winter hair," said a leading veterinarian at a recent horse association meeting. "A man wearing a heavy fur coat couldn't stand hard labor in the warm sunshine. Neither can a horse. Long hair makes a work-horse perspire freely and holds the moisture. Food that should nourish him must go to replenish the heat drawn from the body at night or when standing, by the mass of cold wet hair. On a clipped horse sweat evaporates instantly. The animal can rest comfortably when stabled and thus get the full value of food. Just as a clipped cow is healthier and given more milk, a clipped horse does more work, and the owner profits. The task takes but a few minutes with automatic clippers. No owner of horses should overlook this highly important detail."

MINIMUM RATE FOR BALED ALFALFA

The question of an equitable minimum rate for shipments of Alfalfa from points in New Mexico to Texas and Louisiana received attention in a report by Examiner Henry C. Keene, in State Corporation Commission vs. Atchison, Topeka & Santa Fe, et al. In his report on No. 14708, the examiner said the existing minimum should be found unreasonable and unduly prejudicial to shippers in New Mexico, as compared to the minimum in effect between points in Texas. Keene recommended a minimum of 17,500 for cars under 36 feet and corresponding changes in the case of larger cars. The Texas Commission was represented at the hearing and asked an opportunity to confer with the Commission regarding minima if the findings should necessitate increases in the Texas intrastate minima on Alfalfa.

The examiner has recommended lower minimum than now maintained from New Mexico, chiefly by the Santa Fe, and has advocated a higher minimum than is now applicable in Texas.

ADVERSE TO NEW VARIETIES OF NAKED OATS

It has recently been found by the Department of Agriculture that some new varieties of hull-less or naked oats recently exploited do not bear out the claims made for them. In Canada there has been developed the Liberty Hull-less and it has attracted a great deal of attention. The Government finds that it is not only inferior in yield, but is also very susceptible to smut, this latter feature making necessary the treatment of seed every year.

It apparently is better economy, says the Department, to buy ordinary oats from which the hulls have been removed when hull-less oats is desired for feeding, rather than to try to grow hull-less, or naked, oats. For feeding farm stock, except hogs, squabs, or young chickens, the hull usually is considered an advantage rather than a detriment, as it lightens the ration and increases the bulk. Not until high-yielding, smut-resisting and otherwise better varieties of naked oats are developed and available will it be possible to recommend this type of oats as a safe crop for the farmer to grow.

The fact that the naked oat has gained no foothold in our agriculture after repeated attempts to exploit it during the last 50 or 60 years is sufficient proof of its inability to compete with the best of the common hulled oats.

MILLFEED WEAKER IN NEW YORK

BY C. K. TRAFTON

The general tendencies in the feed trade during the month under review have continued unsatisfactory as in the past month or more.

Offerings of wheat feed were larger than requirements. It was patent that many holders for a rise had become tired and displayed anxiety to unload. This discouragement was attributable largely to two important factors, namely, the reduction in the import duty of approximately 50 per cent which suggests a saving of roughly \$1 per ton to the importer and the approach of spring weather. It is true, of course, that the weather was unusually cold and stormy during March and early April, there being an abundance of snow and resulting in floods throughout the interior, but notwithstanding this it seemed plain that buyers of feed were not willing to make contracts of importance for forward shipment being only willing to negotiate for small lots for prompt delivery.

In some quarters it was stated that trade with farmers and dairymen in this state and been especially dull being restricted with the fact that the consumption of feed had been materially reduced. It was stated in explanation that feeding to cows had been unprofitable because the demand for milk had diminished and prices were no longer remunerative. It was alleged that in Western States and notably Minnesota it was possible to use more milk for butter production because owing to transportation charges the feed was cheaper there than here while the butter was salable at interior points for almost the same as quoted in the East. Butter could

be transported to this and other eastern markets at a lower rate than the grain and feed shipped to farmers in New York.

Late in the month there was slightly more firmness as offerings decreased as millers and western jobbers were selling more sparingly. This was not surprising in view of the unsatisfactory state of the flour market. Millers were placed at a serious disadvantage because they were compelled to pay higher premiums to secure prime wheat but at the same time found it difficult to sell flour on a profitable basis and cut down production.

Corn feeds have remained dull as the supply has not increased sufficiently to cause a decline and therefore buyers have been inclined to hold off.

Cottonseed meal advanced sharply early in the month as production in southern mills have been cut down while the demand from feeders had become more active prompted by the remarkably cold and stormy weather for the season which made it necessary to keep animals indoors which meant more feeding. Subsequently the demand fell off as feeding was reduced partly because of the advent of more seasonable weather.

NEW FEED BRANDS

"BOSS" stock feed. The Quaker Oats Company, Chicago, Ill. Filed November 19, 1923. Serial No. 188,567. Published March 18, 1924.

"HIGH LIFE" dairy feed, chicken feed and stock feed. W. M. Cosby Flour & Grain Company, Birmingham, Ala. Filed June 11, 1923. Serial No. 181,817. Published March 18, 1924.

"COLCO" cattle and chicken foods. The J. H. Colgrove Company, Inc., Canaseraga, N. Y. Filed February 2, 1924. Serial No. 191,673. Published March 18, 1924.

"FULL-O-LIFE" poultry feeds, stock feeds, chick grower, dairy ration, swill feed, horse and mule feed, scratch feed, fattening mash, and egg mash. Cranston-Liggett Grain & Feed Company, Leaven-



worth, Kan. Filed February 1, 1924. Serial No. 191,602. Published March 18, 1924.

"O. K." animal feed composed essentially of grain and grain products. R. O. Klepinger, doing business as the Mineralized Yeast Mills, Ingomar, Ohio. Filed January 4, 1924. Serial No. 190,416. Published March 18, 1924.

"F F F" dairy feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed July 9, 1923. Serial No. 182,994. Published March 25, 1924.

"ANHEUSER-BUSCH BRAND" gluten feed. Anheuser-Busch, Inc., St. Louis, Mo. Filed February 9, 1924. Serial No. 192,005. Published March 25, 1924.

"STRUVENS FISH MEAL" hog, poultry and cattle feed. Charles M. Struven, doing business as Chas. M. Struven & Co., Baltimore, Md. Filed January 25, 1924. Serial No. 191,286. (Not subject to opposition). Published and registered March 25, 1924.

"REDTOP" poultry and stock foods. Albert J. Carpenter, doing business as Heart of Battle Creek Mills, Battle Creek, Mich. Filed December 26, 1923. Serial No. 190,089. Published April 8, 1924.

"BLUE EAGLE" horse feed and dairy feed. Security Mills, Knoxville, Tenn. Filed February 13, 1924. Serial No. 192,222. Published April 1, 1924.

Trademarks Registered

180,911. Stock feed. Arkadelphia Milling Company, Arkadelphia, Ark. Filed September 6, 1923. Serial No. 185,355. Published December 25, 1923. Registered March 11, 1924.

181,080. Poultry food. The Marmite Food Extract Company, Ltd., London, England. Filed July 23, 1923. Serial No. 183,581. Published December 25, 1923. Registered March 11, 1924.

181,462. Poultry feed, digester tankage, and raw bone meal. The Van Iderstine Company, Long Island City, N. Y. Filed October 25, 1923. Serial No. 187,498. Published January 8, 1924. Registered March 18, 1924.

181,550. Baby chick feed. Sperry Flour Company, San Francisco, Calif. Filed October 23, 1923. Serial No. 187,391. Published January 1, 1924. Registered March 25, 1924.

181,761. Feeds and feedstuffs. Quisenberry Feed Manufacturing Company, Kansas City, Mo.

Filed October 17, 1923. Serial No. 187,127. Published January 1, 1924. Registered March 25, 1924. 181,999. Poultry feed. The Bewley Mills, Fort Worth, Texas. Filed October 25, 1923. Serial No. 187,452. Published January 15, 1924. Registered April 1, 1924.

182,159. Cattle, chicken, and pigeon feed. Sunny South Grain Company, Birmingham, Ala. Filed August 1, 1923. Serial No. 183,950. Published January 15, 1924. Registered April 1, 1924.

NEW YORK HAY MARKET STEADY

BY C. K. TRAFTON

One of the outstanding features in the hay market during the month under review was the unprecedentedly few noteworthy changes, prices held remarkably steady although holders of choice grades of Timothy or Light Clover Mixed in large bales were inclined to characterize the market as stronger. The fact is it has been an easy matter to sell choice or No. 1 Timothy promptly at \$30 in large bales, indeed a few lots at Brooklyn terminals have commanded \$31. This was due to the fact that a decidedly large percentage of the hay received came via the N. Y. Central, making a scarcity of desirable grades at other terminals.

Great irregularity and unsettlement prevailed as far as common and inferior grades were concerned. It was exceedingly difficult to sell inferior qualities, more particularly small or perpetual bales. Unfortunately a material part of the hay from Canada was often difficult to market because so much of it was in perpetual bales, which all or nearly all buyers dislike for the well known reason that it cannot be "unbaled" excepting after the expenditure of much time and labor. As a result it seems unwise to ship common or poor hay of this description to this market.

Late in the month the demand seemed to have been satisfied as many buyers withdrew from the market or made decidedly lower bids. Possibly this indifference among buyers was partly attributable to the advent of fine seasonable weather. This, however, was counter-balanced by the decidedly smaller receipts.

On the whole the market has been in an exceedingly unsettled and unsatisfactory condition.

CAUSE OF RED CLOVER FAILURE

Clover failure is one of the most serious problems at present confronting the farmer in many of the Clover sections. With continuous cropping and the consequent reduction of the humus and plant food in the soil the difficulty of growing Red Clover is greatly increased. This condition must be met and solved, since the loss of Red Clover or its equivalent from the rotation leads rapidly to a run-down farm and unprofitable crop yields.

The farmer who is contemplating seeding a field to Clover in the spring may well look to the suitability of that particular field for the growing of Clover before sowing the seed. There are many factors, say the Clover men of the United States Department of Agriculture, which are responsible for the failure of securing or maintaining a stand of Clover, but these factors may be placed in five groups: Soil exhaustion; improper seeding methods, nurse crops, etc.; unfit seed; diseases; and improper treatment the first autumn.

Clover fails more often, according to the opinion of these men, because soils have become poor in lime, phosphorus, potash, or organic matter than for all other reasons. If lime is badly needed, there is no use wasting Clover seed. If phosphorus is the limiting factor, the addition of lime alone, even if the land is "sour," will have slight effect. Manure will do good more often than anything else, but when lime is needed the results from manure will be much greater after this need has been supplied than before. By making the soil conditions such as favor the growth of Clover failure can nearly always be turned to success.

Where Red Clover can not be grown without the addition of lime or other soil amendments and where the application of these is for any reason impracticable Alsike Clover should first be substituted for Red Clover, or it may be possible to grow Mammoth Clover for soil improvement after common Red Clover will no longer thrive, and by turning under the Mammoth Clover the soil may be restored to a condition in which it will produce a stand of Red Clover.

This is information which the hay and feed man can pass along to his farmer patrons with help to the latter.

A feed store is to be opened at Malvern, Ark., by T. S. Day.

Feeds are being manufactured by Harris & Co., at Portland, Ore.

A feed mill has been started at Goodhue, Minn., by Chas. Amundson.

A feed and produce business is to be opened at Bentonville, Ark., by Vernon Rife.

A conference of the dealers, numbering 100, handling the Ralston-Purina Company's line of Checkerboard Feeds, was held recently in Kansas (Continued on Page 714)

FIELD SEEDS

SURVEY OF PROBABLE SEED DEMAND

The Department of Agriculture has secured reports from about 2,500 dealers, indicating the probable demands for field seeds this year. They have found that most kinds indicate an increase in demand since last year. The particular items which dealers indicated in their reports as increasing were Red Alsike and Sweet Clover, Alfalfa, Timothy, sorgo, cowpeas, soy beans and seed corn. The forecast is for a decrease in Millet and sudan grass.

PURE SEED BILL FAILS IN KENTUCKY

A proposed bill drawn along the line of pure seed bills now in effect in many states, failed to get action before the General Assembly in Kentucky. It had been originated by the Experiment station and backed by the seed jobbers of the state; and is likely to be introduced again in 1926.

WITTER SEED BILL OPPOSED

BY C. K. TRAFTON

Marshall H. Duryea, the active and popular head of the Nungesser-Dickinson Seed Company, was a welcome visitor last month at the New York office of the AMERICAN ELEVATOR & GRAIN TRADE having come over from the firm's main office at Hoboken primarily to attend a meeting of the Seeds Committee of the New York Produce

stresses the fact that soy beans will not smother out weeds, the necessity for early plowing and having land in perfect condition to keep the crop clean. As a hay crop soy beans have no superior, according to him, on thin or sour soil, where they will do better than on rich land.

A DEPARTURE IN BROADCASTING

Nearly everyone today has listened in on the radio. In fact, to acknowledge that you have never experienced the thrills of twirling the dials and hearing the voice of the announcer say, "This is Station WFAA, Dallas, Texas" or "This is Station WFI, broadcasting from Philadelphia," is to acknowledge that you are obsolete and unprogressive and as behind the times as the horse and buggy or the old oil lamp.

The programs are as varied in type as are the radio instruments themselves, but there are none which at some time do not include long, dragged-out after dinner speeches, or poorly sung jazz. One time we tuned in on three different stations and each time were greeted by the words "this reminds me of a story"—the time worn introductory remark of the after dinner speaker.

But there is one station which promises to be different. The Henry Field Seed Company of Shenandoah, Iowa, has just opened its Station KFNF, and Mr. Field, the announcer and proprietor, on

SEED PRODUCTION OF FIELD CORN

Considerable advance in the work of the experimental station at Morden, Man., is reported by D. A. Brown, and quantities of seed corn have been grown in an effort to develop a hardy, early maturing strain, combining grain and fodder production, and to have a recommendable strain of seed corn, for distribution among farmers. After three years of work the aim sought has been partially accomplished and the type resulting in 1923 is reported as much truer than previously. The original Northwestern Dent seed was sown in 1921.

ALFALFA SEED GERMINATION

Much investigational work has been carried on in an effort to find the causes of hard seed coat and the agricultural value of such seeds, in Alfalfa. The germination of Alfalfa seeds shows that there are present in practically all lots, two types of live seeds. The first type absorbs water and germinates readily in a few days; the other type has a hard seed coat which prevents immediate absorption of water and hence delays germination. Tests continued over a long period of time in the Colorado Seed Laboratory show that practically one-half of the hard seeds germinate in three months and practically all of them in six months when under the ideal conditions in an incubator.

MILWAUKEE SEED ACTIVITIES

BY C. O. SKINROOD

Meetings have been held in all parts of Wisconsin recently as a part of the general campaign to get farmers to raise more Alfalfa. At Wittenberg, Wis., a very enthusiastic meeting was held and addresses were given by several Alfalfa experts. The aim in that county is to double the acreage of Alfalfa this year, the area last year being 3,000 acres.

Estimates are made that the result of these intensive campaigns should be the increase in the Alfalfa area of about 50 per cent over last year's area of 150,000 acres.

The Wisconsin College of Agriculture is working hard for a larger Alfalfa acreage, but it is also making every effort to have every new Alfalfa farmer start right, so that there will not be any disappointment in the results, for the man who has bad luck with Alfalfa does not try it again for several years.

The dry season of 1923 in which Clover did poorly provided the big boom for Alfalfa last year. The Alfalfa went right along and yielded well despite the dry weather in the critical season.

Wisconsin farmers are steadily waking up to the fact that the state with the largest number of cows should have the biggest Alfalfa production and this is far from being true, the college of Agriculture says. There is much discussion of the best varieties of Alfalfa seed to grow and some farmers have even tried to get Wisconsin Alfalfa seed although there is almost none in existence. Small lots of home grown Alfalfa have sold up to 75 cents a pound, but these supplies are negligible.

One Wisconsin firm has been buying Alfalfa seed in large lots in South Dakota as low as 21 cents a pound and it is sold to farmers as low as 25 cents a pound in large lots and at 30 cents a pound in small lots.

The North American Seed Company says there is an excellent demand for all kinds of grass seeds, particularly American grown, and that the trade volume in practically all lines will surpass that of last year. A genuine scarcity and climbing prices is reported in Alfalfa and Red Clover.

All seeds are selling in a firm market, the North American says, and there is no sign of decline in any variety, in fact all the price changes have been in the direction of an advance. In general the season for seeds is expected to be late because of the backward spring.

The North American quotes the Red Clover market at \$23 to \$24, the Alfalfa, \$23 to \$24. Alsike from \$14 to \$16, and Sweet Clover sells mostly for \$15. Timothy is quoted at \$7.75 to \$8 and White Clover is given a broad range—from \$35 to \$45.

The Courteen Seed Company also reports an exceptionally fine demand for seeds with every indication that the trade for the entire season is going to run ahead of last year. Owing to the late opening of spring, however, the buying is shifted forward quite a little and orders are now coming in with a rush, the company adds.

The heavy buying of Alfalfa seed is reported as proof that the entire state of Wisconsin is going in for Alfalfa more heavily than ever before, the Courteen company reports, although it has no figures on just how much this increase in Alfalfa area will amount to in the aggregate.

Sweet Clover and Alfalfa seed are scarce and the tendency of the market is higher. Buyers in this section of the Northwest are reported as strongly favoring the domestic Clover seed.

The Courteen company quote Red Clover from \$22.50 to \$23.50, Alfalfa rules from \$20.50 to \$23.50, the Alsike from \$13.50 to \$16. The White Clover

(Continued on Page 712)



HENRY FIELD SEED COMPANY'S HOUSE SHOWING RADIO BROADCASTING EQUIPMENT

Exchange, of which he is a member. This meeting was called especially to consider the Witter Seed Bill which recently passed the Assembly of the New York State Legislature and will soon come up in the Senate. The Exchange Committee was opposed to this bill which is also vigorously opposed by members of the trade in this state. It is asserted that in its present shape the bill does not afford seeds merchants an opportunity for a hearing. The chief point of contention is that labels on all bags containing any buckhorn must embrace a statement as to the presence of a "noxious weed." It is pointed out that buckhorn is a common weed all over New York State and that a certain percentage of it is found in even the best samples of imported as well as domestic seed. Mr. Duryea, who is Chairman of the New York State Seed Legislation Committee of the American Seed Trade Association, later went to Albany to oppose the passage of the bill.

INCREASING DEMAND FOR SOY BEANS

Seed dealers are finding a greater demand this year for soy beans, and a number of state agricultural colleges in the Middle West are getting many requests for information regarding this legume. A number of seed distributors are getting posted as to methods for planting soy beans so that they will have sufficient familiarity to assist in disseminating necessary information to inquirers. C. E. Carter, field crops extension specialist of the Missouri College of Agriculture, has prepared some information on the subject and gives a group of facts which will be found to be beneficial. He

the first night announced that it was to be his policy as far as possible to eschew the following classes of entertainment: jazz, elocution, heavy classic music, child prodigies, and heavy, long speeches. He further reserves to himself the privilege of pulling the plug on any speaker who overrides his time limit and thereby tires and discourages his listeners.

The programs are to be arranged to be of particular interest to the farmers and grain dealers of the Middle West and to the residents of the smaller towns in that locality and include both entertainment and educational features. The educational talks on Alfalfa, soy beans, Sweet Clover culture and garden topics will be of as great interest to the farmers of the Middle West as are the recipes, broadcasted daily by Mrs. Peterson of Chicago to the women radio fans.

The station has been licensed as Class A. It is a 500-watt station of the latest type and under favorable conditions is capable of reaching most of the United States. Its wave length is 266 meters. The station's schedule is: General concerts, Wednesday and Saturday, 7:30 p. m. to 9:00 p. m.; sacred song service, Sundays, 6:30 to 7:30; noonday concerts, 12:30 to 12:55.

Through barring jazz and heavy speeches and reserving the right to pull the plug when the speaker grows tiresome, Mr. Field is certainly making a wide departure from the accepted methods of conducting a broadcasting station, and his experiment will be watched with interest, and his programs enjoyed by grain men as they "listen in" to hear something worth while.

HALES AND HUNTER CO.

SEED DEPARTMENT

CHICAGO

WHAT AIR COOLED

SEED CORN

WILL DO

The following germinating tests without selection from official samples of our shipments show the results of our process

Car No. 3399	- - 90%	Car No. 171988	- - 90%	Car No. 136484	- - 90%
Car No. 12202	- - 89%	Car No. 700636	- - 89 $\frac{3}{4}$ %	Car No. 117154	- - 90%
Car No. 22521	- - 90%	Car No. 129242	- - 97%	Car No. 27356	- - 91%
Car No. 26126	- - 88%	Car No. 27407	- - 93%	Car No. 17232	- - 90%
Car No. 3044	- - 90%	Car No. 76095	- - 94%	Car No. 7566	- - 97%
Car No. 76882	- - 90%	Car No. 566657	- - 90%	Car No. 32726	- - 91%
Car No. 31282	- - 92%	Car No. 99356	- - 96%	Car No. 85700	- - 97%

Using unheated air for CORN DRYING duplicates the conditions of a natural drying wind of Autumn

RED COB

98%

LEAMING

100%

PRIDE

98%

REID'S

100%

We Have These in Stock—Car Lots

With above tests, but offer same on the general terms of all our Seed Corn, namely 85%-90%

ALSO

Gold Mine, Silver King, Mammoth White Pearl, No. 13, Wisconsin No. 7, No. 8, No. 12
King Earlies, Early White Minnesota, South Dakota Early Yellow Dent
"DAKO" Brand 97 $\frac{1}{2}$ % Ger.

CAR LOTS BULK OR SACKED

HALES AND HUNTER CO.

Seed Department

CHARLES A. HEATH, Manager

Offices: 327 South La Salle Street

Minneapolis, Minn.

Cragin, Ill.

Riverdale, Ill.

Hammond, Ind.

CHICAGO

FIELD SEEDS

(Continued from Page 710)

is selling from \$38 to \$44 and the Sweet Clover from \$13.75 to \$14.50.

Timothy sells at \$7.50 to \$7.75 mostly and the company says that this is the one line of seeds in which the market has recently been a little easier, although the volume of trade is reported as large.

The Teweles Seed Company also tells the same story regarding urgent demand for seeds which is detailed by practically all the Milwaukee seedsmen at this time.

The most striking scarcity is in the line of White Clover, Alsike and Red Clover, the Teweles company finds and in these varieties the prices tend higher and it is hard to supply all the buyers who are clamoring for domestic seeds.

The Red Clover market is quoted by the Teweles company at \$23 to \$24. Alfalfa also at \$23 to \$24 and other kinds mostly are changed from last month.

The Wisconsin College of Agriculture led by A. H. Wright, college agronomist, has sent out an appeal to the farmers of the state to raise more flax as price conditions are likely to be favorable for this crop. The appeal states that in the past Wisconsin was once a great flax state, but gradually got out of this crop for no good reason whatever. Now is deemed a good time to take up flax raising by the College of Agronomy.

The report informs the farmers that the United States is only raising about one half of the flax that the country needs and for a long time, the crop was only about one third of domestic requirements.

R. A. Moore, who has developed many fine pure bred strains of seed in Wisconsin at the College of Agriculture, has sent an appeal to the farmers of the state to buy home grown seed oats. He says the farmers should beware of the extravagant statements now being circulated to get farmers to buy so-called hull-less oats, which have been tried out at the experimental farms at Madison, Wis., and found wanting. Prof. Moore also states that these oats lodged badly, the yield was poor and in general they were not as satisfactory as the other varieties previously planted in the state.

Another count against the hull-less oats promoters in this state, Prof. Moore says, is that the prices asked for the seed are entirely too high and that no stock should be taken in their promises of immense yields.

MARCH WAS UNSATISFACTORY

The A. W. Scott Company of San Francisco, Calif., in a recent news letter said:

"March closed with the most unsatisfactory month that the hay business probably has ever seen in San Francisco. The interruption to trade caused by the rigid embargoes placed by the state and Government authorities to stamp out the foot and mouth disease and protect the state from its spread, has caused the local market to stand almost still, and except for the distribution from point to point within the state where shipping has been permitted and also the import of hay from the surrounding states, there would have been no business at all to transact. Large holdings of stored hay are being held within quarantined counties and the business generally is in a somewhat demoralized condition."

FLAXSEED PRODUCTION IN THE UNITED STATES

Statistics recently compiled show that 95 per cent of the flaxseed produced in the United States comes from four states, North Dakota, Minnesota, South Dakota, and Montana. Minneapolis exchanges handle about 7,000,000 bushels, or over half the country's entire crop.

The United States changed from an exporting to an importing country in regard to flaxseed in 1908. Imports now exceed production by over 1,000,000 bushels.

The Department of Agriculture has lately reviewed these facts along with detailed statistics on the subject, and states that the average price quoted in Minneapolis Chamber of Commerce last year was \$2.48. The per car value of the crop throughout the Northwest is shown as being \$21.80.

FRENCH EXPORT TAX ON SEEDS

On March 15 cables were received in New York to the effect that the French Government had decided to impose a tax of 25 per cent, effective immediately, on all exports of seeds, but shortly thereafter it was stated that the tax had been cancelled. In reference to these developments a leading French firm stated that the Government, in order to put an end to the wild speculation which had recently taken place against the franc, had taken drastic measures, including an export tax of 25 per cent on all seeds for sowing purposes. The Federation Francaise des Marchands de Graines et Graines de Semence submitted a request that exemption be allowed on a certain

quantity of seed corresponding about to the contracts which had been concluded under the former system. Later they stated that the tax had been cancelled as far as field seeds were concerned. The export of such seeds is free under certain conditions.

THE MISSOURI SEED LABORATORY

The Seed Testing Laboratory at the Missouri College of Agriculture is a branch of the laboratory in the Bureau of Plant Industry, United States Department of Agriculture at Washington, D. C. The laboratory is administered by the Department of Field Crops, and is in charge of an analyst trained in the Washington laboratory and sent out by the Government.

The territory of the Missouri branch covers Missouri, Iowa, Nebraska, Kansas, Colorado, Arkansas, North Dakota, South Dakota, and Oklahoma. Four classes of tests are made: Purity, germination, examination, and identification. In purity tests the per cent of pure seed is determined and the amount of foreign seed and inert matter is also



SOME OF THE MISSOURI LABORATORY'S EQUIPMENT

found. Examination tests are made to determine if a sample contains a certain weed seed. The germination tests give the per cent of seed which germinates within a given time, and in the case of legumes the per cent of hard seed is also given. Identifications are made of certain weed seeds, or of plants bearing seeds. Five purity and 10 germination tests are allowed to any one individual or firm a month. All tests are made free of charge. The reports on samples sent in from Missouri en-



A CORNER IN THE MISSOURI LABORATORY

able the owner to comply with the state seed law which recently went into effect. A total of three to four thousand tests are made each year.

Samples of foreign grown seeds are drawn at the ports of entry under the Seed Importation Act, and are forwarded by the customs officers to the various laboratories in the United States, where they are tested before the shipment is released. The Missouri laboratory tests many of these samples every year.

W. C. Etheridge is at the head of the Fields Crops Department under which the laboratory is administered and to him goes much of the credit for the success of the institution.

KANSAS CITY SEED NEWS

BY B. S. BROWN

Muddy roads are delaying a little field work, but with sunshine, in a few days this work will start with a rush. In the meantime farmers and gardeners are taking advantage of this opportunity to get into town and buy a supply of seeds, plants and shrubs. In the wholesale trade there has been a marked improvement reported in farm implements and repair lines. Country implement dealers are decidedly optimistic about what they claim is the best spring prospect for general good crop yields that the Kansas City territory has for 10 years. The seed houses have a tremendous rush on, necessitating working overtime to keep up with the trade. Merchandise is moving along all

lines. Farmers, gardeners, florists and public are all busy.

The Harnden Seed Company reports a splendid business. Field seeds are all moving, especially the high grade Clover. The demand for the Alsike is very strong. Vegetables of all sorts, including onions, lettuce, radishes, beets, peas, rhubarb roots, spinach, carrots and sweet corn are selling in quantities.

Al Burri of the Mid-West Seed Company reports that the field seed is moving including the Alfalfa, Sweet Clover and Timothy and a strong demand for seed corn. Onion sets are getting short in the yellow and white, but there are a few red yet. This means that these sets will be very high. Mr. Burri has had demand for corn and will have a supply of good stock. The flower seeds are starting strong with the old fashioned flowers leading. There has been a big demand for chicken feed, which the firm carries as a sideline, and business is just opening up for chickens, looking unusually good.

The T. Lee Adams Seed Company reports a wonderful business. Field seeds, vegetables and flower seeds are all moving strong. The best grades are the ones most in demand. Though the season is late and business is rushing on that account, the field conditions are fine and there will probably be less loss from too early planting. The farmers and gardeners are all busy throughout the whole territory.

The windows are all attractively decorated in order to draw Easter trade. Rabbits, bird baths and houses, porch boxes, spring flowers and ferns all lend an atmosphere of Easter and outdoor gardens to the windows.

PROMINENT CHICAGO SEED MERCHANT DIES

John C. Vaughn, president of the Vaughn Seed Company, Chicago, died April 12. He died after an illness lasting only two days, and was 73 years old.

Mr. Vaughn opened his business in Chicago in 1877, originally doing business as a wholesale florist. His present seed business is very extensive and includes two large stores in Chicago, one of which was just opened about a week prior to his death.

He leaves a widow and two sons, Dr. R. T. Vaughn, night warden of the Cook County Hospital and Leonard H. Vaughn.

UNSEASONABLE WEATHER CHECKS NEW YORK SEED ACTIVITIES

BY C. K. TRAFTON

In view of the decidedly variable weather conditions prevailing during the month under review it is by no means surprising that reports as to the state of the market for seeds have been decidedly "spotty." Almost immediately following the writing of our March review, in which we alluded to the active opening up of the spring season, this part of the country was visited by a heavy snowstorm which put an abrupt stop to the good general buying of all varieties previously mentioned. Then came a period of comparatively mild weather and a renewal of a good general demand. This, in turn, was followed by a still more severe storm; the "April Fool Blizzard," which according to some dealers "put back" actual farm work several weeks if not a whole month. Previous to this last unfavorable development business was generally described as "a good average" for the season, but latterly the report is that trade is not up to the usual standard. Hence it was not strange that the generally firm tone prevailing early in the month was succeeded by an easier feeling which wiped out the gains recorded previously, bringing practically all varieties back to the price levels ruling a month ago and in a few cases slightly lower. Another reason for the change was the report that the French Government had decided to withhold for the time being at least the imposition of a 25 per cent export duty on seeds, which was said to be "effective immediately" according to cables received a week previously.

Red Clover had a somewhat interesting month. Early in the month a fairly good demand was reported for prompt shipment and with stocks reduced because of good shipments on old orders and much smaller arrivals from abroad the spot quotation gradually advanced to 21@21½ cents, compared with 19½@20½ cents a month ago. The announcement of the French tax, leading to fears that seed still to be shipped on former contracts would cost several cents more than originally assumed, contributed to the strength. The postponement later of this proposed tax caused a set back. The importing situation remained decidedly firm as France offered little or nothing, partly because of depleted stocks, and partly because of the sharp drop in the value of the French franc to a new low record level, about 3.45 cents. Later importing costs were again increased by the striking rally in the franc, which rose above 6 cents at one time. Arrivals were only about 6,290 bags, compared with 19,500 during February.

Alfalfa likewise gained about 1½ cent which was subsequently lost. The early strength was ascribed

to a continued good demand, reflecting the serious deduction in interior supplies of domestic seed and a more general realization of the necessity of securing large supplies of foreign seed to cover requirements over the long period before the harvesting of our new crop. In the meantime, stocks showed further reduction as good shipments were made on old orders and not a bag was received from either Argentina or France, compared with 1,740 bags received from France in February. Temporary firmness was also caused by the French tax talk, but a more potent influence was the unsatisfactory news from Argentina. Owing to damage by locusts it was stated that only small crops would be harvested in some sections, while other districts were a total loss. It was claimed that little was being harvested and that no shipments could be expected until late in the summer. In some quarters it was asserted that French seed had been bought at equal to about 15 cents c.i.f. New York and that Argentine buyers were endeavoring to secure seed in Kansas. Early in the month no offers were received from Argentina and buyers here were said to be showing interest on a basis of 14@14½ cents c.i.f. for April-May shipment. Later a few small offers were reported at 16 cents c.i.f. A little business was done in French seed at 12½ cents c.i.f. at the outset and later at 13 cents, but latest offers were at 13½@14 cents.

Crimson Clover remained dull and nominally unchanged at 8@8½ cents. Arrivals from France were only 315 bags against the total arrivals for February, which amounted to 1,200.

White Clover continued firm early in the month owing to a fair demand and meager arrivals, the spot basis advancing to 50@51 cents. Later the demand abated and the price reacted to 48@50 cents. The foreign situation remained strong owing to meager stocks. English and Czechoslovakia seed was offered at 47½ cents c.i.f. without leading to much business. Arrivals were 90 bags against 65 in February.

Rye Grass continued dull, but owing to meager arrivals from Europe, only 420 bags, the spot quotation advanced about ¼ cent, or 11¾@12¼ cents. No new business or noteworthy change was reported in the market for import from the United Kingdom. Argentine rye grass was offered sparingly at 6½@7 cents early in the month, but later 7 cents was said to be the lowest price named. Still, it was too early to expect business. The spot quotation receded from 8½@9 cents to 7½@8 cents, with some holders at one time attempting to establish a basis of 11 cents. Total arrivals were 930 bags, including 470 from Argentina, compared with the February total of 750 bags.

Spring Vetch has been more active owing to steady reductions in prices quoted by Dutch shippers. They started the month at 2.70 cents c.i.f. and later offered minimum 25 ton lots at 2.50 cents and smaller lots at 2.70 cents. Still later 15 ton lots were offered at 2¾ cents and smaller lots at 2.60@2.65 cents. Arrivals of both spring and winter vetches totalled 570 bags against 265 in February. Hairy Vetch was offered for March-April shipment from Hamburg at 7½ cents c.i.f. New York, without resulting in business, but sales were made to New Orleans and Savannah at 8½ cents c.i.f.

Argentine red corn was in good demand and with arrivals of only about 400 bags the market became firmer, advancing from 2.70@2.75 cents to 2.85 cents on spot. Argentina offered old crop sparingly at 2.10@2.20 cents c.i.f. Later sales were made of new crop, May-June shipment, at 2.10@2.15 cents. Latterly April-May has been offered at 2.10 cents.

The Bowers-McConnell Company succeeds the Bowers Seed Store at Rome, Ga.

An Alfalfa seed cleaning plant is to be built at Vernal, Utah, for the Occidental Seed Company.

The warehouse of the Russell Seed Company at Ardmore, Okla., is to be rebuilt. It burned with a loss of \$10,000, together with its contents of seeds and supplies.

The seed, implement and hardware business conducted by M. C. Marion & Sons of Elizabethtown, Ky., has been bought by the Skidmore, Spencer Hardware Company.

A store has been leased by J. S. McKean & Son at Leechburg, Pa., in which they will conduct a hardware and seed business. Operations are to begin around the middle of April.

Considerable improvements have been made to the seed department of the Kaiser Bros. of Knoxville, Tenn., wholesalers. The installation of new bins and fixtures will be included.

The Thompson Feed Company of Chehalis, Wash., is installing a new seed cleaning plant which will be equipped with modern equipment for cleaning Clover, Alsike, and similar seeds and grain and grasses of all kinds.

The Great Western Seed Company of Hamilton, Mont., has been incorporated in the State of Wisconsin with headquarters at Eau Claire, Wis. Out of its capital stock of \$60,000, \$25,000 will be devoted to Wisconsin operations.

DRAIN TILE RATES RULING

In a report on No. 12,802, Mason City Brick & Tile Co. et. al. vs. Director-General, the Interstate Commerce Commission covered rates on drain tile, from Mason City, Iowa, from June 25, 1918 to February 29, 1920. It had been alleged that the single-line rates representing increases of 25 per cent over those in effect before June 25, 1918, from Mason City to various points in Minnesota, Wisconsin and the Dakotas were unreasonable, in that they exceeded a flat increase of two cents. Other differences were also alleged and request made for reparation.

BEANS IN CARTONS

One concern in the East has conceived the idea of merchandising beans in cartons. Coupled with this idea they advertise the guarantee that the beans will be of uniform grade and they stress the quality sales argument. By adopting their brand on these cartons they secure the benefit of the general advertising which it has already had, and feel that they have succeeded in increasing their sales.

They had found that in prices the bean business had a good deal of cutting, many retailers eventually relegating beans to a position in their stock analogous to sugar, that is, something on which no legitimate profit could be expected for consistent periods. They have found that by using a specific carton with the brand and guarantee a better assurance of a good market profit is had.

ANOTHER REVISION OF CEMENT RATES

In No. 12,701 the Commission has directed a revision of rates on cement not later than June 20. The order resulted from hearings in Atlas Portland Cement Company vs. Chicago, Burlington & Quincy, et al., and is based on a finding by Commissioner McManamy, to the effect that rates on cement from the plant of the complainant at Hannibal, Mo., to points in Iowa while reasonable are prejudicial to Hannibal and the shippers from that point and preferential to producing towns in Iowa.

Rates from Des Moines, Mason City, and Gilmore City, Iowa, will require revision, on the basis described in scale II, as to distance. Scale II was devised and made operative from Hannibal in the Western Cement Rates case. In Iowa cement manufacturers have a lower scale on single-line hauls at present, and higher in the instance of multiple line hauls.

SISAL BINDING TWINE BUYING PLAN

Many elevators handle binder twine and such dealers will be interested in a dispute between C. D. Orth, of New York, and Secretary Hoover, who recently recommended that sisal for this country be purchased through a common agency. According to Mr. Orth, the dealer would be injured by Secretary Hoover's plan, and he has directed a

reply to the letter which Mr. Hoover sent him inviting criticism. A number of vital facts are cited in the letter of reply.

The Sisal Sales Corporation, says Mr. Orth, has used its influence to prevent undue advances in prices and at the same time has aided in the preservation of the sisal industry in Yucatan by extending financial aid to the planters in times of economic stress. The Hoover suggestion of intermittent buying in order to get better price terms, Mr. Orth points out, might easily result in the adoption of a policy of intermittent selling which would boost prices higher: irregular buying must generally result in irregular production with its attendant evils of high price and shortage of product.

CHATTEL MORTGAGE ON BARLEY

In California Packing Corporation vs. Stone, it was held in the District Court of Appeal of California (222 Pac. 193) that, where granting clause conveyed to the chattel mortgagee all property on which barley was grown during seasons 1921-24 inclusive, the mortgage covered the barley crop, though the mortgage stated that it was to secure performance of a contract covering the crops. It was held that where the removal of mortgaged barley from the premises on which grown constituted a basis of claim, the law providing that the lien of a mortgage on a growing crop continues after removal of the crop, so long as it remains on the mortgagor's land, is not applicable. Replevin or claim and delivery were held applicable in obtaining possession of property covered by the chattel mortgage where such mortgage provides for delivery to the mortgagee.

FEDERAL GRADING OF BEANS

An effort has been made in the last few years to get the Department of Agriculture to undertake establishing grades of dry edible beans. It is now reported that W. A. Wheeler, of the Hay, Feed and Seed Division, has started collecting data and is making progress in accumulating valuable information.

A laboratory has been equipped for the purpose of handling this data, and while no special funds are available for the work, the Department has found it possible to undertake it in connection with other activities already under way, thus making some preliminary work possible.

It is intended that the grades eventually established shall take into consideration the methods of marketing, kinds of equipment used in preparing for the market, and the primary fact that no grades are to be included that are not a benefit to the market. At the inauguration of the work special attention is being given to the small White, or Pea bean, Pinto beans, and Red Kidney beans, and work with other varieties will be begun as soon as possible.

The Mangelsdorf Seed Co.

Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.

ATCHISON

KANSAS

North American Seed Co.

Wholesale Grass and Field Seeds

Milwaukee, Wis.

"THE HOUSE OF QUALITY"

CRAWFORD HAMMOND & CO.

BUENOS AIRES

NEW YORK

IMPORTERS

SEEDS

PEAS

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Nungesser-Dickinson Seed Co.

NEW YORK, N. Y.

Wholesale Seed Merchants

Buyers and Sellers

Timothy, Red, White, Alsike and Alfalfa,
Clovers, Redtop and Millet Seeds

SEEDS

BETTER SEEDS; BETTER CROPS

CHAS. E. PRUNTY

7 South Main Str. SAINT LOUIS



BUYERS—SELLERS, FIELD SEEDS

ED. F. MANGELSDORF & BRO.

Wholesale Field Seeds

First and Victor Sts., St. Louis, Mo.

WHITNEY-ECKSTEIN SEED CO.

Wholesale Seed Merchants

Correspondence Invited

BUFFALO, N. Y.

Hay, Straw and Feed

(Continued from Page 709)

City. Lectures on animal feeding and trade development were made.

A feed and flour store is to be opened at Amherst Wis., by J. E. Koziszkowski & Son.

Jake Curtis, L. W. Waller and others have organized at Mobile, Ala., as the Curtis Feed Co.

A wholesale and retail feed and fertilizer business has been opened at Gilmer, Texas, by J. R. Penn.

The feed store at Senath, Mo., formerly conducted by T. A. Woods has been bought by W. E. Pool.

A plant will probably be established at Delta, Utah, by the Arkio Molasses Feed Company of Kansas.

The Independent Flour & Feed Company at East Moline, Ill., has installed a grinding mill at a cost of \$2,500.

Machinery for the erection of a feed mill is to be made by John Craigwill of Crockett (bill to Senatobia), Miss.

A wholesale and retail feed, flour and produce business has been opened at Dermott, Ark., by R. E. Jordan and R. M. Adams.

The business of H. A. Callison at Hoquiam, Wash., has been bought by the Twin City Flour & Feed Company of Aberdeen.

The interest of Arion Arnold in the feed and coal business at Brodhead, Wis., has been bought by Mr. Arnold's father, F. E. Arnold.

A half interest in the Walker Meal & Feed Company of West Hickman (Hickman p.o.), Ky., has been bought by D. R. Capps of Amite, La.

A feed and seed business has been opened at Pawnee Rock, Kan., by Frank Gilbert. He will specialize in seed, and will handle kafir, sumac, etc.

The wholesale flour and feed business owned by the Fayetteville Mercantile Company at Fayetteville, Ark., has been bought by the Fullbright estate.

The feed business of Will Nance at Ripley, Mass., has been consolidated with that of Jim Stricklin and will be conducted as Nance & Stricklin.

Charles Pell is now with the Seven Bros., Inc., feed and flour brokers of Clarksburg, W. Va. He was formerly with the Nowak Milling Company of Hammond, Ind.

Capitalized at \$15,000, the Caughman Feed & Seed Company has been incorporated at Columbia, S. C. W. F. Coughman is president and J. P. Bay-singer, secretary.

A complete grinding and mixing machinery equipment has been installed by the Binding-Stevens Feed Company of Tulsa, Okla., for the manufacture of poultry and dairy feeds.

The partnership of G. H. McElroy and P. C. Turney at Marshall, Ark., which conducted a feed, flour and grocery business, has been dissolved. They will maintain separate stores.

The business of M. P. Adams at Glidden, Texas, has been bought by Hastedt & Wirtz, flour and feed dealers of Columbus, Texas. He will operate a branch store there under C. R. Walling.

Schanck, Hutchinson & Field of Tightstown, N. J., have been succeeded there by Schanck & Field, Inc., who will continue the wholesale business in hay, straw and potatoes. Joseph B. Schanck is president and Harry R. Field, secretary-treasurer.

The main office is in Hightstown as formerly, with branches at Robbinsville, Sharon and Vincen-town N. J.

Capitalized at \$50,000, the Hypo Molasses Hay Company has been incorporated at Memphis, Tenn., by C. A. Gerber, George C. Kaucher, W. E. Lunday, Thos. H. Allen, Peter McIntyre and G. E. Patteson.

A feed business is to be conducted at Lucasville, Ohio, by J. C. McKinley. He was formerly with the Grimes-Stritmatter Company and the Zeisler Grain Company. He has erected a new building in which to house his business.

To manufacture livestock and poultry feed, the Champion Milling & Grain Company has been incorporated at East St. Louis, Ill. The company already operates at Clinton, Iowa. R. V. Clark is the East St. Louis representative of the firm.

For Sale

ELEVATORS AND MILLS

FOR SALE IN NORTHERN INDIANA

Nearly new iron clad elevator, 10,000 bushels' capacity, with feed house attached. LOCK BOX 241, Lagrange, Ind.

MILL FOR SALE

City of 30,000; no competition within 30 miles. Price \$10,000. Will consider trade or take working partner. P. O. BOX 235, Port Huron, Mich.

FOR SALE

Northeast Kansas elevator, capacity 14,000 bushels, feed and coal business in connection; located on St. Joseph and Grand Island Railway. HAMLIN CO-OPERATIVE ASSOCIATION, Hamlin, Kan.

FOR SALE VERY CHEAP

Ten thousand-bushel steel grain tank; 25-h.p. steam engine and boiler, in very good condition; fine track scale; 1,000-bushel corn sheller, Western make. WABASH GRAIN COMPANY, Oaktown, Ind.

WONDERFUL OPPORTUNITY FOR "LIVE WIRE"

Thriving feed, seed, wholesale and retail flour and cereal manufacturing business for sale in city of 11,000 population, 50 miles from Chicago. Property centrally located. Well equipped cereal plant manufacturing a well-known pancake flour as well as other cereals. Splendid jobbing connections throughout Indiana, Illinois, Michigan and Ohio. Good reasons for disposing of business. For further particulars, write INDIANA, Box 4, care AMERICAN ELEVATOR & GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

MACHINERY

OIL ENGINES FOR SALE

Fifteen-horse Y type; 10-horse Y type. Ready for delivery. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

HUMPHREY ELEVATOR FOR SALE

Two-floor outfit, three-horsepower motor driven, A.C., 220 v., 60 cycle. Used five years. JUNG BAKING COMPANY, Waseca, Minn.

WANTED TO BUY FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

OIL ENGINES FOR SALE

60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.

A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

FOR SALE

Sixteen and 18-inch Monarch Attrition Mills, nearly new.

Thirty-bushel corn cracker and crusher, new, \$38.

Eighteen, 20 and 24-inch Dreadnaught Grinders. Grain scalping shoe, new, \$35.

Eighteen-inch American Feed Grinder, new plates, \$40.

Ten-inch Letz Cob Corn Mill, \$20.

L. F. PERRIN, Box 375, Port Huron, Mich.

WILL SELL AT BIG SACRIFICE

Destruction by fire of grain elevator which supplied our new feed mill at Louisville, causes us to dismantle the latter. Machinery absolutely new, never used. Plant burned before completion.

One 24-inch Robinson Twin Motored Attrition Mill.

Three Howe Molasses Feed Mixers.

Two Richardson Molasses Feed Automatic Scales.

Three Richardson Automatic Scales.

One Lanaux Molasses Scale Measure.

One molasses super heater.

One Jeffrey Tray Elevator (5 floors).

One boiler.

Nineteen Gauntt Percentage Feeders.

Fourteen Marvel Percentage Feeders.

Large quantity elevator, V. buckets, belting, split pulleys, solid pulleys, motor drive pulley, screw conveyors, etc. Write for particulars.

THE EARLY & DANIEL CO., Cincinnati, Ohio.

Miscellaneous Notices

FOR SALE

Home Grown Mammoth, Medium and Alsike seed. WALTER G. TRUMPLER, Tiffin, Ohio.

FOR SALE

Twelve hundred second-hand cotton grain bags, 16-oz., 25c each, f. o. b. St. Louis, any size lot. FOELL & COMPANY, 123 Market St., St. Louis, Mo.

FOR SALE

"Dirk's Yellow Pride Seed Corn" is wonderful this year. Shelled and graded \$3 per bushel, bags free. Satisfaction guaranteed or your money back. JNO. V. DIRK, Box A, Weston, Ohio.

COUNTRY GRAIN BUYER WANTED

Active man under 40 with some experience, willing and able to work in or out of office. Give age, experience, references, salary, married or single, in first letter. A. H. SHELBY, Sidney, Ill.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

SEED CORN FOR SALE

One thousand bushels of Wimples Yellow Dent, either in the ear or shelled. Germination 90 per cent or better. Can make prompt shipment; \$3.50 per bushel cash with order. J. H. LEMON SEED COMPANY, Beresford, S. D. The home of Wimples Yellow Dent Seed Corn.

Hunt Coupling for Controlling the Stretch of Manila Transmission Ropes



Ask for Descriptive Catalog M-17-1
C. W. Hunt Co., Inc., West New Brighton, N. Y.

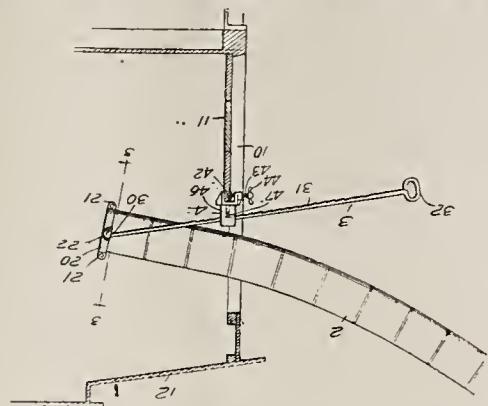


GRAIN TRADE PATENTS

Bearing Date of December 25, 1923

Grain loading spout regulator.—Walter Gay Slater, Wiley, Colo. Filed June 13, 1922. No. 1,478,921.

Claim: A grain loading spout regulator comprising a rod having one end engaging the free end of the spout through a universal connection, a swivel guide head for said rod adapted to be attached to the side of a vehicle to be loaded and having a guiding channel for the rod open at the top to permit lateral insertion of the rod, a ratchet tooth rack on the bottom of the rod, a ratchet engaging member at the



bottom of the channel in the guide head, said complementary ratchet elements being arranged to engage under the force of gravity to hold the rod against outward movement and to disengage upon rotation of the rod, and a single controlling handle for manipulating the rod for universal movement of the spout and controlling the engagement and disengagement of the ratchet elements.

Seed separator.—James B. Rylander, Austin, Texas, assignor to The Rylander Company, Austin, Texas. Original application filed June 28, 1920. No. 1,478,616. Divided and this application filed August 30, 1922.

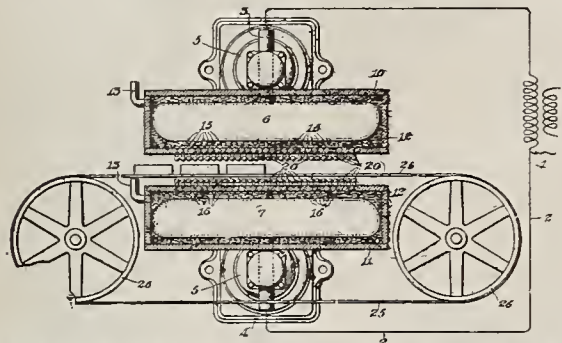
Bearing Date of January 1, 1924

Machine for treating small grain.—Max A. Wheeler, Lind, Wash. Filed May 3, 1922. No. 1,479,764.

Bearing Date of January 8, 1924

Apparatus for treating grain, beans, etc., by disruptive conduction.—Franklin S. Smith, Philadelphia, Pa., assignor to The Products Protection Corporation, New York, N. Y., a corporation of Delaware. Filed March 27, 1919. No. 1,480,572. See cut.

Claim: In an apparatus for treating products electrically the combination of a transformer, a plurality of condensers, and a plurality of electrodes connected with the respective condensers, the electrodes having connection with one condenser being situated in op-



posed spaced relation with respect to those connected with the other condenser, and the said condensers and electrodes being arranged in series with the secondary of said transformers.

Grain door for railway cars.—Edward Posson, Chicago, Ill., assignor of one-half to Frederick C. Meagly, Chicago, Ill. Filed September 18, 1919. No. 1,480,008.

Bearing Date of February 5, 1924

Sectional grain spout.—William C. Myers, Des Moines, Iowa. Filed December 26, 1922. No. 1,482,576.

Grain door for cars.—Herbert S. Nesbitt, Minneapolis, Minn., assignor of one-third to Oscar P. Gustavsen, Minneapolis, Minn., and one-third to Thomas D. McMahon, St. Paul, Minn. Filed July 10, 1922. No. 1,482,941.

Bearing Date of February 12, 1924

Metal grain door.—Garth G. Gilpin, Riverside, Ill., assignor to Union Metal Products Company, Chicago, Ill., a corporation of Delaware. Filed January 3, 1922. No. 1,483,576.

Method and apparatus for fumigating grain.—Arthur R. Young, Kansas City, Mo., assignor to A. R. Young Material Company, Kansas City, Mo., a corporation of Missouri. Filed April 6, 1923. No. 1,483,406.

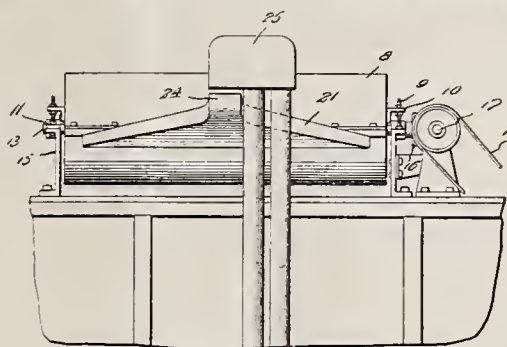
Bearing Date of February 19, 1924

Braking mechanism for roller conveyors.—Joseph Grossman, Wallington, N. J. Filed September 20, 1922. No. 1,483,971.

Seed hulling device.—Orion Youngblood, Boonville, Ind. Filed July 31, 1923. No. 1,483,963. See cut.

Claim: A hulling attachment for a separating machine, or the like, comprising a casing of substantial

cross shape in plan with the central portion thereof of cylindrical form, a toothed concave member mounted upon the lower part of said central cylindrical portion, a toothed drum mounted within said cylindrical portion and co-operating with said concave member for hulling seed, a rotary conveyor in one end of the casing to receive the material from the hulling drum and to



convey it to one side of the separator, and means to rotate said drum and said conveyor, the other end of said casing being in the form of a flared inclined chute adapted to receive material from the discharge end of a weigher of the wheat separating machine, and diverging partitions within said chute for distributing the material evenly along the entire length of the drum.

Self-agitating hopper.—William H. Whitaker, Shelbyville, Ill. Filed July 11, 1923. No. 1,484,599.

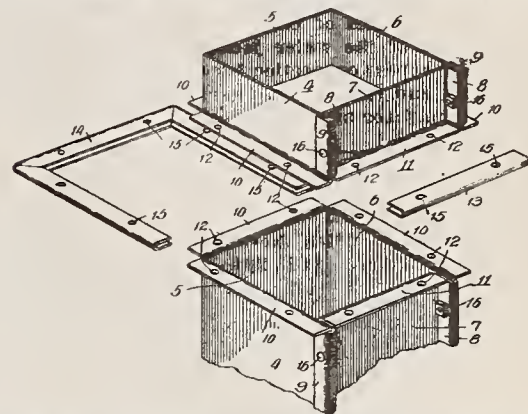
Grain door.—Jacob Mattson, Duluth, Minn. Filed February 17, 1923. No. 1,484,184.

Conveyor for the butt removals of corn huskers, etc.—Clarence A. Hoy, Buffalo, N. Y., assignor to Peerless Husker Company, Buffalo, N. Y., a co-partnership. Filed January 15, 1921. No. 1,484,373.

Elevator leg.—Jacob J. Gutermann, Chicago, Ill., assignor to Weller Manufacturing Company, Chicago, Ill., a corporation of Illinois. Filed January 26, 1920. No. 1,484,491. See cut.

Claim: An elevator leg formed of sheet metal sections,

each section comprising a member bent to form three integral sides, a fourth side being formed of a separate strip and having longitudinal integral flanges lapping the inner and outer faces of the margins of the oppositely disposed sides on said member and extending in the



planes thereof, means extending through the flanges and end margins to secure the sides together, end flanges on and integral with the three-sided member and strip respectively, and means to secure the end flanges of contiguous sections together.

Bearing Date of February 26, 1924

Grain door structure.—Clarence H. Foss, Minot, N. D. Filed March 11, 1922. No. 1,484,634.

Process of disinfecting seeds and composition therefor.—Max Engelmann, Wilmington, Del., assignor to E. I. du Pont de Nemours & Co., Wilmington, Del., a corporation of Delaware. Filed October 10, 1921. No. 1,485,021.

Bearing Date of March 4, 1924

Supplemental grain door for freight cars.—John J. Miller, Chicago, Ill. Filed September 5, 1922. No. 1,485,866.

COAL

COAL TRADE DULL IN CINCINNATI

Dullness in the coal trade around Cincinnati, Ohio, is indicated by the fact that early in April 8,000 empty coal cars were reported on sidings in Cincinnati. It is also reported that there are no indications of early cargoes up the lakes, such as was the case last year when the docks were cleaned up.

DECREASE IN ALL RAIL COAL TO EAST

Reports show a decrease of 23 per cent in all movement of coal into eastern New York and New England. This largely due to the high rate of anthracite movement earlier in the year caused by the demand for domestic sizes to overcome the deficit caused by the miners' strike of 1922.

COAL TESTS IN NORTHWESTERN STATES

Over \$8,000 a month is being expended in experimental work by coal companies in the northwestern states and Alaska, acting in conjunction with the United States Bureau of Mines at Seattle, Wash. The aim of this work is to learn and make known the quality of coal from various sources and to aid in grading the products and securing dependability.

WEST VIRGINIA BITUMINOUS WAGES AGREED

A new contract for the northern West Virginia field has been agreed upon, effective April 1. All basic day and tonnage rates in force were reaffirmed, and certain changes were made in portions of the agreement relating to working conditions. Day wage rates range from \$6.74 to \$7.26 a day and tonnage rates vary from 62.7 cents an hour to 87.6 cents for hand work.

COST OF STRIKES

The tremendous cost of strikes in the coal industry is evidenced by the estimates which were given to the public recently by the National Association of Manufacturers. They estimate that strikes and lockouts cost \$703,839,575 in 1923. More than three-fourths of this loss is assigned as the portion suffered by the general public, the remainder being shared variously by the employers and workmen. The public loss has not only been financial, but actual suffering has resulted and unlimited inconvenience.

PROPOSED TWIN CITIES RATE INCREASE

The Interstate Commerce Commission has recently been considering a proposal to increase the all-rail rate of anthracite coal from Buffalo to Minneapolis and St. Paul. Representative Walter H. Newton, of Minneapolis, has been opposing this increase, which amounts to \$1.68 per ton.

While the larger part of the anthracite coal sup-

ply of this area comes by way the lakes, the fact remains that 20 per cent is normally shipped all-rail and at certain periods of the year a good deal more.

Representative Newton said in his speech against the increase:

"With an advance of all-rail coal at the rate of \$1.68, it is apparent that no anthracite coal will move all-rail excepting in a period of great shortage when it is impossible to move coal by way of the lakes. Practically all anthracite coal, therefore, that is used, if this rate goes into effect, will move by way of the lakes, and will be under the control of the dock companies. The independent retailers will then have to depend upon the dock companies to get their supply of coal. The result of all this will be that the consumer, both as to supply and price, will be at the mercy of the dock companies.

"We are therefore fearful that this will eventually mean an increased price of anthracite coal to the consumer. The price now is more than the consumer should be called upon to pay."

THE STORY OF COAL OVER THE RADIO

A series of six articles on the story of coal, two of which have already been given, is to be broadcasted by Station KYW of Chicago at intervals of one week. Station KYW will attempt by this undertaking to emphasize the magnitude and the importance of the operations which make it possible for the consumer to secure coal as easily as he does.

The two already broadcasted, on April 3 and April 10, were "Coal, Its Kinds and Uses" and "The Forces Set in Motion When You Buy a Ton of Coal." The remaining four lectures with dates are:

April 17—The Function of the Coal Mine Operator.

April 24—The Function of the Wholesaler of Coal.

May 1—The Function of the Retail Coal Merchant.

May 8—Who Gets the Dollar which you Spend for Coal?

The article on the function of the retail coal merchant, which will in all probability be of most value and interest to the grain elevator operator who handles coal as a sideline, will be given by Lawrence W. Ferguson, president of the Chicago Coal Merchants Association. That on the functions of the wholesaler will be given by Charles L. Dering, president of the American Wholesale Coal Association and the other four are given by Owen Meredith Fox, associate editor of *The Black Diamond*.

WORLD'S COAL OUTPUT INCREASES

The world's total production of coal in 1923 was approximately 1,335,000,000 metric tons, according to the United States Geological Survey. This is

more than 100,000,000 tons more than the preceding year and only falls 7,000,000 short of the output in the high record year, 1913.

The production of the United States is reported as 34 per cent increase; and all countries listed except Japan and Germany show increases. The German decrease from the 1922 figure is estimated by the Imperial Coal Council at 58 per cent, largely attributable to the economic disorders resulting from the occupation of the Ruhr.

RETAILERS COAL CONVENTION IN JUNE

The National Retail Coal Merchants association is planning to holding its annual convention at Bluefields, W. Va., June 4-6, 1924. All the necessary details for making preparations were disposed at a recent meeting of the officers in Detroit. Bluefields is situated in the center of the Pocahontas coal fields and will give opportunity for retailers to view the source of the industry.

COAL WAGE ADJUSTMENT

Miners and operators of the central Pennsylvania bituminous fields have entered an agreement continuing the existing wage rates for three years, ending in March, 1927. B. M. Clark, speaking in behalf of the mine owners has stated that this may result in shutting down 50 per cent of the union mines. He said the organized mines could not

compete with non-union operations, which could mine coal at 50 cents to a dollar a ton less than union mines.

In taking this action the Pennsylvania mines are following the lead of the operators of the central competitive fields, who entered a like agreement at their Jacksonville conference.

OIL USERS REVERTING TO COAL

A slight decline in the price of anthracite steam sizes and a corresponding advance in oil within the last month is said to have been the reason for the return to the use of coal by many who abandoned its consumption a year or more ago when labor difficulties sent coal prices up. This tendency to change has been noted among domestic as well as industrial consumers.

The feature which makes this significant is the size of some of the users who have changed, as one of the plants in New Jersey uses over 70,000 tons annually and a number of others of not much less size are also concerned.

The Reliable Coal Company has taken over the business of Drumm & Conover at Arcadia, Ind.

A coal conveying machinery system is being installed by the White Elevator Company of El Paso, Ill.

The retail coal and grain business of J. B. Wilcox

at Princeton, Mo., has been bought by the Princeton Elevator Company.

The grain and coal business of Thomas Woof at Stuart, Iowa, has been taken over by Walworth & Johnston of Greenfield.

Walter M. DeVoe has bought out the retail coal and lumber business of the Independent Grain & Lumber Company at Elberton, Iowa.

The retail coal, grain and feed business of Stephen Hollands & Son at Hornell, N. Y., has been discontinued and the firm dissolved.

The retail coal and lumber business of the Garrison Grain & Lumber Company at Garrison, Iowa, has been bought by the Midwest Lumber Company.

The coal, feed and grain business of A. Howell at Shelby, Mo., has been bought by E. J. Finney, who was formerly manager of the Farmers Grain & Elevator Company.

To buy and sell flour, feed, lumber, coal and building materials, the Harbough Lumber Company was incorporated at Twin Lakes, Wis. H. C. and C. A. Harbaugh and W. F. Nagle are interested.

The retail coal and grain business of the Biddison Coal & Grain Company at Leon, Iowa, has been taken over by the recently organized Biddison-Graham Grain Company. Mr. Graham has bought the Lingle interests in the first firm.

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Compiled for Use of

Grain and Milling Trades

OF THE

United States and Canada

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MITCHELL BROS. PUBLISHING CO.

431 South Dearborn St., Chicago, Ill.

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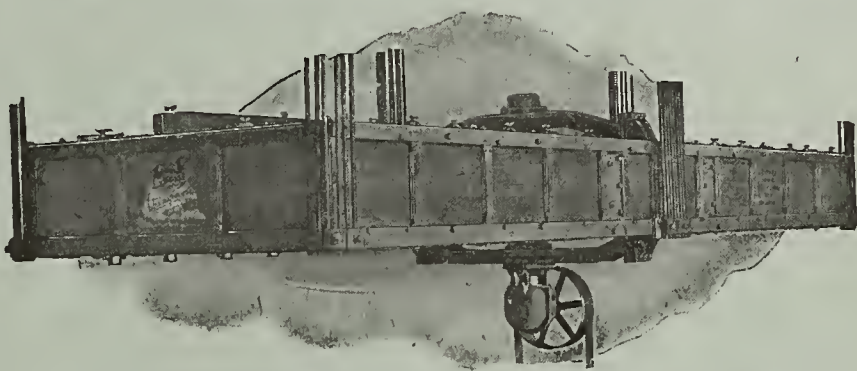
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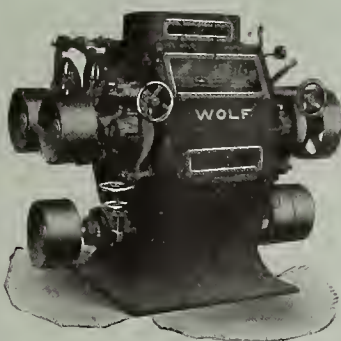
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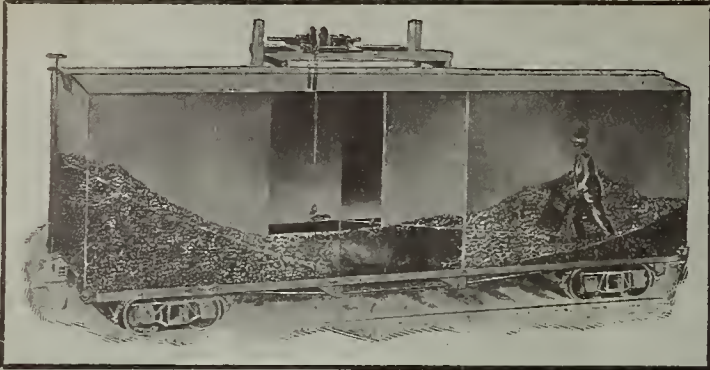
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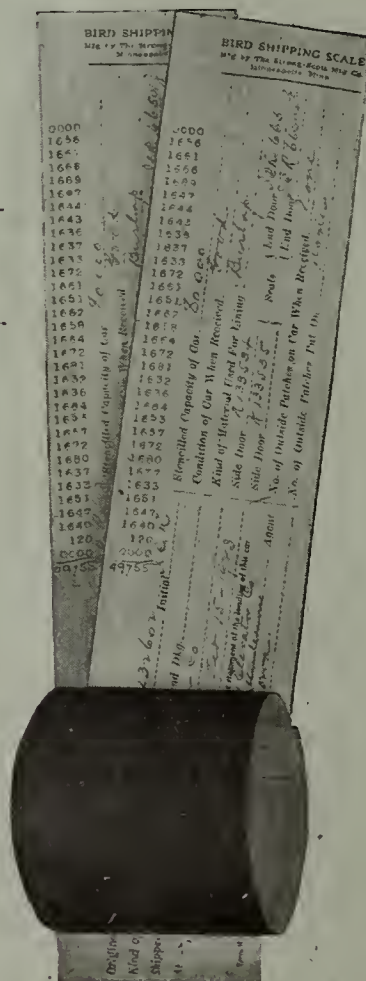
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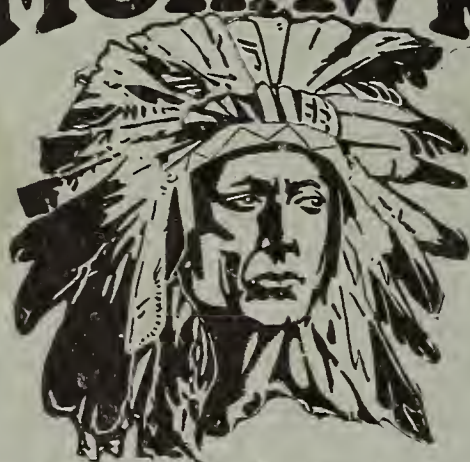
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